RCRA Final Permit Sign-off

Background

Facility Name..... SABIC Innovative Plastics Mt. Vernon, LLC
(Owner)..... Mt. Vernon Phenol Partnership
(Operator)... SABIC Innovative Plastics Mt. Vernon, LLC
Facility Location..... 1 Lexan Lane
Mount Vernon, IN 47620

Facility ID Number..... IND 006 376 362
Public Comment Period..... 45 Days (TBD)

Type of Permit

__Operating __Treatment __Disposal **Modifications:**
__Post-Closure __Storage __Subpart X **__Class 2 ___EPA Initiated**
__BIF X Incineration __Other **__Class 3**

Review Package Content

X Draft Permit with Attachment X Fact Sheet X Administrative Record Index
X Draft Public Notice __Statement of Basis X Administrative Record
X Cover Letter to Facility __Other (_____)

Applicable Permit Conditions

____ Land Disposal Restrictions ___ Other (_____)
__x__ BIF
____ CMI Imposed

Concurrences

	Initials	Date
1. Permit Writer (Name): Jim Blough Phone Number: 6-2967	JB	10/14/11
2. Section Secretary (Proofed)		
3. Technical Expert Jae Lee	Jae	10/13/11
4. Section Chief (Proofed) Mary Setrian	MS	12/12/11
5. ~~WMB~~ R Secretary (Logged-in only)	AJ	12/15/11
6. IMS (in PMB) [Sign-off only if public-noticing will be done by the U.S. EPA. Cross out if not applicable.]	~~CB~~	~~1/10/12~~
7. ORC - Assistant Regional Counsel (Name): Tom Kmiecik - Permit Coordinator (Name): Tom Nash - SWERB Section Chief (Name): Randy Bishlawi	TK TAN ___	12/22/11 12/22/11 ___
8. ~~WMB~~ RB Secretary (proofed and 2nd logging)		
9. ~~WMB~~ RB Chief		1/6/12
10. Division Director, ~~WPTD~~ LCD		1/18/12

typos on Pg 1

MG 1/10/12

MG 1/17

MG 1/17

7001 0320 0006 1448 7593

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

L-8J

JAN 19 2012

CERTIFIED LETTER: 7001 0320 0006 1448 7593
RETURN RECEIPT REQUESTED

Ms. Christine H. Schuster
Senior Environmental Engineer
SABIC Innovative Plastics Mt. Vernon, LLC
One Lexan Lane
Mt. Vernon, Indiana 47620-9364

Re: Final Federal Permit
IND 006 376 362

Dear Ms. Schuster:

Enclosed is a copy of the final federal Resource Conservation and Recovery Act (RCRA) permit for SABIC Innovative Plastics Mt. Vernon, LLC, Mt. Vernon, Indiana. Unless review is requested under 40 CFR § 124.19, the federal permit will become effective on the date which is indicated on the title page of the enclosed federal RCRA permit.

The federal RCRA draft permit was put on public notice in the "Mount Vernon Democrat" newspaper and announced on the local radio station. A copy of the federal RCRA draft permit was available for review at the Alexandrian Public Library, 115 W. Fifth Street in Mount Vernon, Indiana. The public comment was from August 25, 2010 to October 8, 2010.

SABIC Innovative Plastics Mt. Vernon, LLC, submitted comments received by the EPA on the federal RCRA draft permit during the public comment period. EPA's Response to comments is enclosed with this letter.

Eligibility to appeal the federal permit is discussed further in 40 CFR § 124.19. All original documents are to be signed in blue ink with five copies marked as such. EPA must receive the petition for review in Washington, DC via U.S. Postal Service at the address indicated below within thirty (30) days after service of notice of the final permit decision.

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board (1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460-0001

Submissions can also be made by hand-delivery or courier, mailed via Federal Express, UPS, or non-U.S. Postal Service at the following address:

U.S. Environmental Protection Agency
Clerk of the Board
Environmental Appeals Board
Colorado Building
1341 G Street, N.W., Suite 600
Washington, DC 20005

A copy of the petition should also be sent to:

U.S. Environmental Protection Agency, Region 5
RCRA Branch (LR-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604

The procedures for filing an appeal are found in 40 CFR § 124.19. The administrative appeal procedure must be completed prior to any action seeking judicial review.

If you have questions concerning the final federal RCRA permit, please contact James Blough of my staff, at (312) 886-2967.

Sincerely,

Margaret M. Guerriero
Director
Land and Chemicals Division

Enclosures

cc: Mr. Vic Windle, IDEM

RESPONSE TO COMMENTS
REGARDING
THE FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
PERMIT TO BE ISSUED TO SABIC INNOVATIVE PLASTICS MT. VERNON, LLC
MOUNT VERNON, INDIANA
IND00637 362

A. INTRODUCTION

This response is issued pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 124.17, which requires that any changes of draft permit conditions be specified along with the reasons for the change; that all significant comments be described and responded to; and that any documents cited in the response be included in the administrative record. Comments were requested regarding the U.S. Environmental Protection Agency's (EPA) tentative determination to reissue a RCRA permit to the Permittee.

The 45-day public comment period commenced on August 8, 2010 with a public notice in the Mount Vernon Democrat newspaper and on a local radio station. The comment period ended on October 8, 2010.

The administrative record for the federal permit was available at the EPA Region 5 office at 77 West Jackson Blvd., Chicago, Illinois. Additionally, pertinent information and materials were available at the Alexandrian Public Library, 115 W. Fifth Street in Mount Vernon, Indiana.

The community has not identified itself as an environmental justice area or revealed that environmental justice issues are involved. U.S. EPA does not believe that environmental justice issues exist at this Site.

B. RESPONSE TO COMMENTS

Comments on the draft federal permit were received from Sabic Innovative Plastics Mt. Vernon, LLC. (Sabic).Those comments are summarized below:

1. The state RCRA permit referenced on page ii is held only by SABIC Innovative Plastics Mt. Vernon, LLC. Mt. Vernon Phenol Plant Partnership is not a permittee under the state RCRA permit. Thus, the reference to "Permittees" is inaccurate.

EPA's Response: EPA agrees with SABIC's comment and this Condition will be modified in the final permit as proposed.

2. The state RCRA permit for the facility is a corrective action permit, not a permit for the treatment, storage, or disposal of hazardous waste (TSD) as the draft permit indicated. In order to make the statement in the federal permit complete

and accurate, it should reflect this fact. The corrective action permit has no relationship to the present draft federal permit, which is for the treatment of hazardous waste. Without that clarification, a reader of the document might find the sentence misleading.

EPA's Response: EPA agrees with SABIC's suggestion to clarify the relationship between the State RCRA corrective action permit and the proposed federal permit in the text both at the top of page ii and in Section I.A. of the permit. EPA does not agree, however, that the permits are entirely unrelated. The facility no longer has a State TSD permit because it no longer holds hazardous wastes for longer than ninety (90) days before they are managed in the boilers and associated equipment regulated under this permit. EPA agrees that it is important to clarify the relationship between the State RCRA corrective action permit and the federal permit. It is also important to identify the relevant regulatory obligations that might otherwise be included in a TSD permit that still apply to the facility under this permit, the corrective action permit and/or under RCRA regulations. To provide additional precision, EPA will modify the final permit to make this clarification.

3. In the second paragraph of section I.A, the last sentence contains the clause "... promulgated under subparts AA, BB, or CC of 40 CFR Part 264 limiting air emissions." A reference to 40 CFR 270.4 is provided. However, the reference in the sentence to Part 264 is incorrect. The regulation cited refers not to Part 264 but to Part 265 (see 40 CFR §270.4(a)(4)).

EPA's Response: EPA agrees with SABIC's comment and this Condition will be modified in the final permit to substitute "265" for "264" as requested.

4. SABIC identified some typographical errors in the draft permit and asked that they be corrected.

EPA's Response: EPA will modify the final permit to correct these errors.

CHANGES TO THE DRAFT PERMIT

Reference to draft permit date has been deleted, because it is no longer needed in the final permit.

The following corrections were made to reflect the clarifications described above and to correct typographical errors:

Page ii of signature page, 1st and 2nd paragraph

The paragraphs were modified to read:

"Specifically, this permit addresses: (1) boilers burning hazardous waste fuel (40 CFR Part 266, Subpart H); (2) certain restrictions and prohibitions on land disposal of hazardous substances in accordance with 40 CFR Part 268; and, (3) other federal RCRA regulations for which the state has not yet been authorized."

"This permit contains the federal RCRA permit conditions. Permittee SABIC Innovative Plastics Mt. Vernon, LLC also has a state RCRA corrective action permit which contains conditions issued by the State of Indiana's RCRA program authorized under 40 CFR Part 271. Any hazardous waste activity which requires a RCRA permit and is not included in the federal or state RCRA permit, is prohibited."

The reasons for this change are described in B.1 and 2 above.

Page ii of signature page, 3nd paragraph,

The word " Permittees' s" was deleted and replaced with "Permittees'" to correct a typographical error.

Page ii of signature page, 4th paragraph,

Commas were removed before and after the word "hereto" to correct a typographical error.

Page iii of signature page, 1st paragraph, first sentence

A space was removed in the parenthetical "(30)" to correct a typographical error.

Page iii of signature page,

" Bruce Sypniewski Acting Director" was replaced with "Margaret M. Guerriero, Director" because of a change in the Division Director since the draft permit was issued.

Condition I.A- Effect of Permit, 1st and 2nd paragraphs, Page 1 of 16

Condition I.A. was revised to read:

"This permit contains federal permit conditions. The Permittee SABIC Innovative Plastics Mt. Vernon, LLC also has a state RCRA corrective action permit. You are hereby allowed to manage hazardous waste in accordance with this permit. Under this permit, the storage, treatment and disposal of RCRA hazardous waste must comply with all terms and conditions in this permit. Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Pursuant to 40 CFR § 270.4, compliance with the RCRA permit during its term constitutes compliance for purposes of enforcement with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under 40 CFR Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 CFR Part 264 regarding leak detection systems; or (4) are promulgated under subparts AA, BB, or CC of 40 CFR Part 265 limiting air emissions. (40 CFR § 270.4)"

The reasons for this change are described in B.2 and 3 above.

Condition I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination , Page 2 of 16

The last sentences were revised to read:

"You may perform construction associated with a Class 2 permit modification request beginning sixty (60) days after submission of the request unless the Director, Land and Chemicals Division, U.S. EPA Region 5 (Director), establishes a later date. (40 CFR § 270.42(b)(8))"

This change corrects typographical errors.

Condition I.E.1, Duty to Comply, Page 2 of 16

The heading was corrected to substitute "I.E.1" for "1.E.1" to correct a typographical error.

Condition I.E.13 Transfer of Permits , Page 6 of 16 2nd paragraph 2nd sentence

The word "the" was replaced with "a" before "Permittee's name" and a comma was added after "reissuance" to correct typographical errors.

Condition I.E.14.c Twenty-Four Hour Reporting, Page 7 of 16 first and last paragraphs

"(5)" was replaced with "(5)" to correct typographical errors.

SECTION II - BOILERS (40 CFR Part 266, Subpart H), II.A GENERAL, Page 10 of 16

II.A GENERAL was revised to read: "You must meet the applicable requirements of 40 CFR Part 266, Subpart H (§ 266.100 through § 266.112) - Hazardous Waste Burned in Boilers and Industrial Furnaces. You must comply with the applicable requirements of 40 CFR Part 265, Subpart BB and CC (Air Emissions Standards). You must also meet the requirements of 40 CFR Part 264 standards regarding:"

The reasons for this change are described in B.2 above.

Condition II.C.1.e,Page 13 of 16

A period was added to the end of the sentence to correct a typographical error.

Condition II.C.3.a, Page 14 of 16

The word "offs" was changed to "off" to correct a typographical error.

Condition II.C.4 Boiler Ancillary Equipment , Page 15 of 16

The following clause was added to the end of the sentence:

"and to comply with the applicable requirements of 40 CFR Part 265, Subparts BB and CC."

The reasons for this change are described in B.3 above.

Condition II.C.5a Boiler System Maintenance Requirements, Page 15 of 16

Sentences 4 and 5 in the paragraph were revised to read:

"The boiler ash must be handled, transported and disposed of as hazardous waste, including compliance with the applicable requirements of 40 CFR Part 268. The Permittees may define the beginning and end of each fifteen-month period."

The reasons for this change are described in B.2 above.

The final permit will be revised to reflect these changes and will be corrected in the final permit.

DETERMINATION

Based on a full review of all relevant data provided to the EPA, the EPA has determined that the final permit contains such terms and conditions necessary to protect human health and the environment.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT

Facility Name and Location: SABIC Innovative Plastics Mt. Vernon, LLC
One Lexan Lane
Mt. Vernon, Indiana 47620

Owner(s): 1. Mt. Vernon Phenol Plant Partnership
One Lexan Lane
Mt. Vernon, Indiana 47620

2. SABIC Innovative Plastics Mt. Vernon, LLC
One Lexan Lane
Mt. Vernon, Indiana 47620

Operator(s): SABIC Innovative Plastics Mt. Vernon, LLC
One Lexan Lane
Mt. Vernon, Indiana 47620

EPA Identification Number: **IND 006 376 362**

Effective Date: **March 6, 2012**

Expiration Date: **March 6, 2017**

Authorized Activities:

The U.S. Environmental Protection Agency hereby issues a Resource Conservation and Recovery Act (RCRA) permit (hereinafter referred to as the "permit") to **SABIC Innovative Plastics Mt. Vernon, LLC (Operator and Co-Owner)** and **Mt. Vernon Phenol Plant Partnership (Co-Owner)** (hereinafter referred to as the "Permittees" or addressed in the second person as "you") in connection with the boilers burning hazardous waste and associated activities at the Mt. Vernon facility in Indiana.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as RCRA) and EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Specifically, this permit addresses: (1) boilers burning hazardous waste fuel (40 CFR Part 266, Subpart H); (2) certain restrictions and prohibitions on land disposal of

hazardous substances in accordance with 40 CFR Part 268; and, (3) other federal RCRA regulations for which the state has not yet been authorized.

This permit contains the federal RCRA permit conditions. Permittee SABIC Innovative Plastics Mt. Vernon, LLC also has a state RCRA corrective action permit which contains conditions issued by the State of Indiana's RCRA program authorized under 40 CFR Part 271. Any hazardous waste activity which requires a RCRA permit and is not included in the federal or state RCRA permit, is prohibited.

Permit Approval:

On January 31, 1986, the State of Indiana received final authorization pursuant to Section 3006 of RCRA, 42 USC § 6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State of Indiana has also received final authorization to administer certain additional RCRA requirements on several occasions since then. However, because the EPA has not yet authorized the State of Indiana to administer certain regulations, including the Boilers and Industrial Furnaces regulations (see 40 CFR Part 266.100 et seq., also known as the BIF regulations), the EPA Region 5 is issuing the RCRA permit requirements for operations at the Permittees' facility which fall under these regulations.

You must comply with all terms and conditions contained in this permit. This permit consists of all the conditions contained herein, all documents attached hereto and all documents listed or cross-referenced in these documents, approved submittals (including plans, schedules and other documents), and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 266, 268, 270, and applicable provisions of RCRA.

This permit is based on the assumption that the information contained in: (1) the RCRA permit application dated July 2008, (2) the approved trial burn report, dated June 2009, and (3) any subsequent modifications to the Part B application (hereinafter, referred to as the "Application") is accurate, and the facility is configured, operated and maintained as specified in the permit, and as described in the permit application.

Any inaccuracies in the submitted information may be grounds for the EPA to terminate, revoke and reissue, or modify this permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43; and for enforcement action. You must inform the EPA of any deviation from, or changes in, the information in the Application that might affect your ability to comply with the applicable regulations or conditions of this permit.

Opportunity to Appeal:

Petitions for review must be submitted within thirty (30) days after the EPA serves notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may file a petition for review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR § 124.19.

Effective Date:

This permit is effective as of March 6,2012 and will remain in effect until March 6,2017, unless revoked and reissued under 40 CFR § 270.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 270.51(a).

By: _____ Date: January 18, 2012

Margaret M. Guerriero
Director
Land and Chemicals Division

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SECTION I—STANDARD PERMIT CONDITIONS

I.A EFFECT OF PERMIT

This permit contains federal permit conditions. The Permittee SABIC Innovative Plastics Mt. Vernon, LLC also has a state RCRA corrective action permit. You are hereby allowed to manage hazardous waste in accordance with this permit. Under this permit, the storage, treatment and disposal of RCRA hazardous waste must comply with all terms and conditions in this permit. Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Pursuant to 40 CFR § 270.4, compliance with the RCRA permit during its term constitutes compliance for purposes of enforcement with Subtitle C of RCRA except for those requirements not included in the permit which: (1) become effective by statute; (2) are promulgated under 40 CFR Part 268 restricting the placement of hazardous waste in or on the land; (3) are promulgated under 40 CFR Part 264 regarding leak detection systems; or (4) are promulgated under subparts AA, BB, or CC of 40 CFR Part 265 limiting air emissions. (40 CFR § 270.4)

This permit does not: (1) convey any property rights or any exclusive privilege (40 CFR § 270.30(g)); (2) authorize any injury to persons or property, or invasion of other private rights; or (3) authorize any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued, or any action brought, under: (1) Sections 3013 or 7003 of RCRA; (2) Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC §§ 9601 *et seq.* (commonly known as CERCLA); or (3) any other law protecting human health, welfare, or the environment.

I.B PERMIT ACTIONS

I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination

The EPA may review and modify, revoke and reissue, or terminate this permit for cause, as specified in 40 CFR § 270.41, § 270.42, and § 270.43. The EPA may also review and modify this permit, consistent with 40 CFR § 270.41, to include any terms and conditions it determines are necessary to protect human health and the environment under Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or a

notification of planned changes or anticipated noncompliance on your part will not stay the applicability or enforceability of any permit condition. (40 CFR § 270.30(f))

You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective. You may perform construction associated with a Class 2 permit modification request beginning sixty (60)days after submission of the request unless the Director, Land and Chemicals Division, U.S. EPA Region 5 (Director), establishes a later date. (40 CFR § 270.42(b)(8))

I.B.2 Permit Renewal

This permit may be renewed as specified in 40 CFR § 270.30(b) and Condition I.E.2 of this permit. In reviewing any application for a permit renewal, the EPA will consider improvements in the state of control and measurement technology, and changes in applicable regulations. (40 CFR § 270.30(b) and RCRA Section 3005(c)(3))

I.C SEVERABILITY

This permit's provisions are severable; if any permit provision, or the application of any permit provision to any circumstance, is held invalid, such provision's application to other circumstances and the remainder of this permit will not be affected. Invalidation of any statutory or regulatory provision on which any condition of this permit is based does not affect the validity of any other statutory or regulatory basis for that condition. (40 CFR § 124.16(a))

I.D DEFINITIONS

The terms used in this permit will have the same meaning as in 40 CFR Parts 124, 260 through 266, 268 and 270, unless this permit specifically provides otherwise. Where neither the regulations nor the permit define a term, the term's definition will be the standard dictionary definition or its generally accepted scientific or industrial meaning.

I.E DUTIES AND REQUIREMENTS

I.E.1 Duty to Comply

You must comply with all conditions of this permit, except to the extent and for the duration for which an emergency permit authorizes such noncompliance (see 40 CFR § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and will be grounds for:

enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (40 CFR § 270.30(a))

I.E.2 Duty to Reapply

If you wish to continue the permit-regulated activities after the expiration date, you must apply for and obtain a new permit. You must submit a complete application for a new permit at least 180 days before the permit expiration date, unless the Director grants permission for a later submittal date. The Director will not grant permission to submit the complete application for a new permit later than the permit's expiration date. (40 CFR § 270.10(h) and § 270.30(b))

I.E.3 Permit Expiration

Unless revoked or terminated, this permit and all conditions herein will be effective for a fixed term not to exceed 10 years from this permit's effective date. This permit and all conditions herein will remain in effect beyond the permit's expiration date if you have submitted a timely complete application (40 CFR § 270.10 and §§ 270.13 through 270.29), and through no fault of your own, the Director has not made a final determination regarding permit reissuance. (40 CFR §§ 270.50 and 270.51)

I.E.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, you are not entitled to a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with this permit. (40 CFR § 270.30(c))

I.E.5 Duty to Mitigate

In the event of noncompliance with this permit, you must take all reasonable steps to minimize releases to the environment resulting from the noncompliance and must implement all reasonable measures to prevent significant adverse impacts on human health or the environment. (40 CFR § 270.30(d))

I.E.6 Proper Operation and Maintenance

You must always properly operate and maintain all facilities and treatment and control systems (and related appurtenances) that you install or use to comply with this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires you to operate

back-up or auxiliary facilities or similar systems only when necessary to comply with this permit. (40 CFR § 270.30(e))

I.E.7 Duty to Provide Information

You must provide the Director, within a reasonable time, any relevant information that the Director requests to determine whether there is cause to modify, revoke and reissue, or terminate this permit, or to determine permit compliance. You must also provide the Director, upon request, with copies of any records this permit requires. The information you must maintain under this permit is not subject to the Paperwork Reduction Act of 1980, 44 USC §§ 3501 *et seq.*, (40 CFR §§ 264.74(a) and 270.30(h))

I.E.8 Inspection and Entry

Upon the presentation of credentials and other legally required documents, you must allow the Director or an authorized representative to (40 CFR § 270.30(i)):

I.E.8.a Enter at reasonable times upon your premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

I.E.8.b Have access to and copy, at reasonable times, any records that you must keep under the conditions of this permit;

I.E.8.c Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.E.8.d Sample or monitor, at reasonable times, any substances at any location to ensure permit compliance or as RCRA otherwise authorizes.

Notwithstanding any provision of this permit, EPA retains the inspection and access authority which it has under RCRA and other applicable laws.

I.E.9 Monitoring and Records

I.E.9.a Samples and measurements taken for monitoring purposes must be representative of the monitored activity. The methods used to obtain a representative sample of the wastes, contaminated media, treatment residue, or other waste to be analyzed must be the appropriate methods from Appendix I of 40 CFR Part 261, or the methods specified in the EPA-approved waste analysis plan, or an equivalent method approved by the Director. Laboratory methods must be those specified in *Test*

Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846, latest edition), *Methods for Chemical Analysis of Water and Wastes* (EPA 600/4-79-020), or an equivalent method, as specified in the referenced waste analysis plan. (40 CFR § 270.30(j)(1))

I.E.9.b You must retain, at the facility, all records as specified in 40 CFR § 264.74.

I.E.9.c You must submit all monitoring results at the intervals specified in this permit.

I.E.9.d You must retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records, or other documents, unless a different period is specified in this permit. The 3-year period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. (40 CFR §§ 270.30(j), 270.31 and 264.74(b).)

I.E.10 Reporting Planned Changes

You must notify the Director as soon as possible of any planned physical alterations or additions to the permitted facility. (40 CFR § 270.30(l)(1))

I.E.11 Reporting Anticipated Noncompliance

You must notify the Director in advance, of any planned changes in the permitted facility or activity that may result in permit noncompliance. Advance notice will not constitute a defense for any noncompliance. (40 CFR § 270.30(l)(2))

I.E.12 Certification of Construction

Subject to the requirements of 40 CFR § 270.32(b)(2) and § 270.42 Appendix I, you must not operate any RCRA air emission control devices completed after the effective date of this permit until you have submitted to the Director, by certified mail or hand-delivery, a letter signed both by your authorized representative and by a registered professional engineer. That letter must state that the portions of the facility covered by this permit (including all air emission control devices required by this permit) have been constructed or modified in compliance with the applicable conditions of this permit. In addition, you must not operate the permitted control devices until either:

I.E.12.a The Director or his/her representative has inspected those portions of the facility and finds them in compliance with the conditions of the permit; or

I.E.12.b The Director waives inspection and the Permittee may commence treatment, storage, or disposal of hazardous waste in accordance with 40 CFR § 270.30(l)(2)(ii)(B).

I.E.13 Transfer of Permits

This permit is not transferable to any person, except after notice to the Director. You must inform the Director and obtain prior approval of the Director before transferring ownership or operational control of the facility (40 CFR § 270.42, Appendix I). Under 40 CFR § 270.40, the Director may require permit modification, or revocation and reissuance, to change a Permittee's name and incorporate other RCRA requirements. Before transferring ownership or operation of the facility during its operating life, you must notify the Director and obtain prior approval and notify the new owner or operator in writing of the requirements of this permit and the requirements of 40 CFR Parts 264 and 270. (40 CFR §§ 264.12(c), 270.30(l)(3), and 270.40(a))

I.E.14 Twenty-Four Hour Reporting

I.E.14.a You must report to the Director any noncompliance with this permit that may endanger human health or the environment. Any such information must be promptly reported orally, but no later than 24 hours after you become aware of the noncompliance.

I.E.14.b The report must include the following information (40 CFR § 270.30(l)(6)): (1) the release of any hazardous waste that may endanger public drinking water supplies; (2) the release or discharge of hazardous waste from the hazardous waste management facility; or (3) a fire or explosion from the hazardous waste management facility. The oral report describing the occurrence and its cause must include the following details:

(1) Name, title and telephone number of the person making the report;

(2) Name, address and telephone number of the facility;

(3) Name, address and telephone number of owner or operator;

(4) Date, time and type of incident;

(5) Location and cause of incident;

(6) Identification and quantity of material(s) involved;

(7) Extent of injuries, if any;

(8) Assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;

(9) Description of any emergency action taken to minimize the threat to human health and the environment; and

(10) Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.14.c In addition to the oral notification required under Conditions I.E.14.a and I.E.14.b of this permit, a written report must also be provided within five (5) calendar days after you become aware of the circumstances. The written report must include, but is not limited to, the following:

(1) Name, address and telephone number of the person reporting;

(2) Incident description (noncompliance, including any release or discharge of hazardous waste), including cause, location, extent of injuries, if any, and an assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;

(3) Period(s) in which the incident (noncompliance, including release or discharge of hazardous waste) occurred, including exact dates and times;

(4) Whether the incident's results continue to threaten human health and the environment, which will depend on whether the noncompliance has been corrected and/or the release or discharge of hazardous waste has been adequately cleaned up; and

(5) If the noncompliance has not been corrected, the anticipated period for which it is expected to continue, and the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance.

The Director may waive the requirement that the written report be provided within five (5) calendar days; however, you will then be required to submit a written

report within 15 calendar days of the day on which you must provide oral notice, in accordance with Conditions I.E.14.a and I.E.14.b of this permit. (40 CFR § 270.30(1)(6))

I.E.15 Other Noncompliance

You must report all instances of noncompliance not reported under Condition I.E.14 of this permit, when any other reports this permit requires are submitted. The reports must contain the information listed in Condition I.E.14. (40 CFR § 270.30(l)(10))

I.E.16 Other Information

I.E.16.a Whenever you become aware that you failed to submit or otherwise omitted any relevant facts in the permit application or other submittal, or submitted incorrect information in the permit application or other submittal, you must promptly notify the Director of any incorrect information or previously omitted information, submit the correct facts or information, and explain in writing the circumstances of the incomplete or inaccurate submittal. (40 CFR § 270.30(l)(11))

I.E.16.b All other requirements contained in 40 CFR § 270.30 not specifically described in this permit are incorporated into this permit and you must comply with all those requirements.

I.F SIGNATORY REQUIREMENT

You must sign and certify all applications, reports, or information this permit requires, or which are otherwise submitted to the Director, in accordance with 40 CFR § 270.11. (40 CFR § 270.30(k))

I.G REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR

Except as otherwise specified in this permit, all reports, notifications, or other submittals that this permit requires to be submitted to the Director should be sent by certified mail, express mail, or hand-delivered to the Environmental Protection Agency, Region 5, at the following address:

RCRA Branch, LR-8J
Land and Chemicals Division
EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

I.H CONFIDENTIAL INFORMATION

In accordance with 40 CFR Part 2 Subpart B, you may claim any information this permit requires, or is otherwise submitted to the Director as confidential. You must assert any such claim at the time of submittal in the manner prescribed on the application form or instructions, or, in the case of other submittals, by stamping the words "Confidential Business Information" on each page containing such information. If you made no claim at the time of submittal, the Director may make the information available to the public without further notice. If you assert a claim, the information will be treated in accordance with the procedures in 40 CFR Part 2. (40 CFR § 270.12)

You have the burden of substantiating the claimed information is confidential, and EPA may request further information from you regarding such claim, and may reasonably determine which such information to treat as confidential.

I.I DOCUMENTS TO BE MAINTAINED AT THE FACILITY

You must maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to them.

I.I.1 Operating Record

You must maintain in the facility's operating record the documents required by this permit, and by the applicable portions of 40 CFR §§ 264.1035, 264.1064, 264.1084, 264.1088, 264.1089 and 40 CFR § 264.73 (as they apply to the equipment used to comply with this permit).

I.I.2 Notifications

You must maintain notifications from generators accompanying initial incoming shipment of wastes subject to 40 CFR Part 268 Subpart C, that specify treatment standards, as required by 40 CFR §§ 264.73, 268.7, and this permit.

I.I.3 Copy of Permit

You must keep a copy of this permit on site, including all the documents listed in any attachments, and you must update it as necessary to incorporate any official permit modifications.

I.J ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE

I.J.1 All attachments and documents that this permit requires to be submitted, if any, including all plans and schedules are, upon the Director's approval, incorporated into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to enforcement action under Section 3008 of RCRA. This action may include fines, or permit suspension or revocation.

I.J.2 This permit also includes the documents attached hereto, all documents cross-referenced in these documents, and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 268, 270, and the applicable provisions of RCRA, all of which are incorporated herein by reference.

I.J.3 Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance. The Director may grant written requests for extensions of due dates for submittals required in this permit.

I.J.4 If the Director determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Director may modify this permit according to procedures in Condition I.B of this permit.

I.J.5 If any documents attached to this permit are found to conflict with any Condition in this permit, the Condition will take precedence.

I.K COORDINATION WITH THE CLEAN AIR ACT

You must fully comply with the RCRA requirements contained in this permit. This permit does not include the requirements imposed by the Clean Air Act.

SECTION II - BOILERS (40 CFR Part 266, Subpart H)

II.A GENERAL

You must meet the applicable requirements of 40 CFR Part 266, Subpart H (§ 266.100 through § 266.112) - Hazardous Waste Burned in Boilers and Industrial Furnaces. You must comply with the applicable requirements of 40 CFR Part 265, Subpart BB and CC (Air Emissions Standards). You must also meet the requirements of 40 CFR Part 264 standards regarding:

II.A.1 Imminent Hazard Action. (40 CFR §264.4)

II.A.2 General Facility Standards. (40 CFR §§ 264.11-264.18)

II.A.3 Preparedness and Prevention. (40 CFR §§ 264.31-264.37)

II.A.4 Contingency Plan and Emergency Procedures. (40 CFR §§ 264.51-264.56)

II.A.5 Manifest System, Recordkeeping, and Reporting. (40 CFR §§ 264.71-264.77)

II.A.6 Closure. (40 CFR § 264.111-264.115)

II.A.7 Financial Requirements. (40 CFR Part 264 Subpart H, §§ 264.142, 264.143, and 264.147- 264.151)

II.B HAZARDOUS WASTE FUEL

II.B.1 Hazardous Waste Fuel

You may burn hazardous waste fuel generated from the following process sources:

- Phenol manufacturing distillation cracker bottoms (K022)
- Heavy end cracking byproduct light overheads (D018)
- Alpha-methyl styrene (AMS) distillation column bottoms (D001)
- Acetophenone distillation column bottoms (D001)
- Oil purge from dephenolation (D001)

The hazardous wastes described above may be mixed with Bis-phenol-A (BPA) manufacturing distillation tars, which is a non-hazardous waste.

II.B.2 Co-Firing with Natural Gas

In each boiler (H-530A and H-530B), natural gas must be fired whenever hazardous waste fuel is fired. The minimum heat input from the natural gas in each boiler when hazardous waste fuel is burned shall be 2.0 million BTU per hour (hourly rolling average).

II.B.3 Hazardous Waste Fuel Analysis and Feed Rate Limits

II.B.3.a The as-generated hazardous waste fuel shall be stored in one of the 2 holding tanks (V-525A & B). Samples shall be taken and analyzed to determine: (1) average Btu, (2) metals concentrations, (3) ash content, and (4) other factors limiting the boiler operation to comply with regulatory requirements. The sample analysis results should be used for computing the maximum hazardous waste fuel flow to the boilers for the purpose of meeting the boiler operating conditions, hereinafter stipulated, and the metals emission limits. You must follow the approved waste analysis plan included in the RCRA Part B Permit Application.

II.B.3.b The hazardous waste fuel feed rate limits on metals and on total chloride and chlorine set forth in Condition II.B.3.c below are based on the approved Trial Burn Report and the Adjusted Tier I feed rate screening limits in 40 CFR §§ 266.106 and 266.107. For any significant changes in the hazardous waste fuel characteristics due to manufacturing processes which may affect the compliance of 40 CFR §§ 266.106 and 266.107, you must process a Class 3 permit modification in accordance with 40 CFR § 270.42.

II.B.3.c The ash feed to each boiler shall not exceed 4.4 pounds/hour (1,996 g/hr). The feed rate of each of the following constituents shall not exceed the respective maximum feed rate shown. The feed rate of each constituent must be calculated by multiplying the hazardous waste fuel hourly rolling average feed rate by the constituent's concentration.

No.	Constituents	Maximum Feed Rate Per Boiler g/hr/boiler
1	Arsenic (As)	5.2
2	Beryllium (Be)	4.8
3	Cadmium (Cd)	6.4
4	Total Chromium (Cr)	14.7
5	Antimony (Sb)	3,411
6	Barium (Ba)	568,541
7	Lead (Pb)	1,023
8	Mercury (Hg)	3,411
9	Silver (Ag)	34,112
10	Thallium (Tl)	5,685
11	Chlorine/Chloride	4,548

II.B.4 Hazardous Waste Fuel Temperature and Pressure

The hazardous waste fuel must be maintained at a minimum temperature of **140 °F** (hourly rolling average) and the temperature must be monitored on a continuous basis. When the temperature falls below 140 °F, it should trigger a boiler trip or automatic waste feed cutoff.

The hazardous waste fuel supply pressure must be monitored at least one time during each of the period of time 0000-0800 hours, 0800-1600 hours, and 1600-2400 hours and be recorded electronically or in the boiler operating record. When the hazardous waste fuel supply pressure (between the pump discharge and the burner firing valve (which for H-530A is valve number FV5319, and which for H-530B is valve number FV5367)) falls below 125 psig or the hazardous waste fuel supply pressure (downstream of such burner firing valve) exceeds 150 psig, either a boiler trip or automatic waste feed cut-off shall be triggered.

II.C BOILERS (H-530A and H-530B)

II.C.1 General

II.C.1.a The hazardous waste fuel boilers are designated as H-530A and H-530B. These boilers were designed and manufactured by Babcock & Wilcox (B&W) in accordance with ASME Fired Pressure Vessel Code. Each boiler is rated for 70,000 pounds/hr steam production at 250 psig. The steam generated from the boilers is piped to a common medium pressure steam header, which is maintained at an average pressure of 175 psig.

II.C.1.b The boiler burners were also manufactured by B&W. Boiler cold start up must be fired with natural gas to establish a minimum boiler chamber temperature listed in the table below prior to firing hazardous waste fuel.

II.C.1.c The boilers must be operated with effective permissives and electric interlockings to ensure safe and proper operation. Failure to satisfy permissive controls should trigger an appropriate response, which may include preventing boiler startup or boiler trip.

II.C.1.d You must submit a trial burn plan every 5 years from the effective date of this permit unless another option is available under 40 CFR § 270.22(a).

II.C.1.e Each boiler must meet the definition of a "boiler" as set forth in 40 CFR § 260.10.

II.C.2 Boiler Operating Conditions

When hazardous waste fuel is burned in the boiler, the following parameters must be monitored and the following limits must be met. The abbreviations used in the following table shall mean:

HRA: Hourly rolling average
SCFM: Standard Cubic Foot/Minute

No.	Parameters	H-530A	H-530B
1	Maximum Steam Header Nominal Pressure, psig	205	205
2	Minimum Feedwater Supply Temperature, ^{0} F (HRA)	251	251
3	Maximum Hazardous Fuel Heat Input, MM Btu/Hr (HRA)	71.9	72.0
4	Maximum Hazardous Fuel Input, pounds/hour (HRA)	4,432	4,444
5	Maximum Steam Output with Hazardous Fuel, pounds/hour (HRA)	61,061	63,093
6	Maximum Total Heat Input, MM Btu/Hr (HRA)	74.0	74.0
7	Minimum Heat Input, MM Btu/Hr (HRA)	56.6	57.7
8	Minimum Oxygen Concentration in Flue Gas, % (HRA)	3.6	2.9
9*	Minimum Boiler Chamber Temperature, ^{0} F (HRA)	1,704	1,733
10	Minimum Atomizing Steam Pressure over waste feed pressure, psig (HRA)	35	35
11	Maximum CO Concentration (60-minute average), ppmv dry @ 7 % O_2	100	100
12	Maximum Combustion Air Flow, SCFM (HRA)	14,491	14,882
13**	Maximum Particulate Emission, grains/dscf @ 7 % O_2	0.08	0.08
14	Soot Blowing Frequencies, times/day	1	1

* Two independent measurements of the boiler chamber temperature shall be made, and an hourly rolling average shall be calculated for each set of measurements. The lower hourly rolling average of the two shall be used to determine compliance with the minimum temperature standard.

** No continuous monitoring of this item is required. It shall apply at all times and shall be met during any particulate matter test.

II.C.3 Automatic Waste Feed Cut-Offs

II.C.3.a The automatic waste feed cut-off systems for a boiler shall be activated when one of the following conditions occurs on that boiler (40 CFR § 266.102(e)(7)(ii)):

(1) High hazardous waste fuel pressure
(2) Low hazardous waste fuel pressure
(3) Low hazardous waste fuel temperature
(4) Low atomizing steam pressure
(5) High CO concentration
(6) Low combustion chamber temperature
(7) High combustion air flow rate

II.C.3.b The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7 days when hazardous waste is burned to verify operability in accordance with 40 CFR § 266.102(e)(8)(iv).

II.C.3.c The automatic waste cutoff must be recorded for the event which actuated the cutoff. The frequency of such cutoff shall not exceed 14 times per week per boiler.

II.C.4 Boiler Ancillary Equipment

Deaerating feedwater heater, chemical feed system, continuous blow-down, blow-off system, boiler trims, high and low level alarms, feedwater regulator, instrumentation and control must be properly maintained to safeguard the operations of the boilers and to comply with the applicable requirements of 40 CFR Part 265, Subparts BB and CC.

II.C.5 Boiler System Maintenance Requirements

II.C.5.a If a boiler burns hazardous waste at any time during a fifteen-month period, then that boiler must be cleaned at least once during that fifteen-month period. Cleaning consists of removing, to the extent practicable, accumulated ash in the boiler. An extension of time between cleanings may be requested of, and approved by the Director. The boiler ash must be handled, transported and disposed of as hazardous waste, including compliance with the applicable requirements of 40 CFR Part 268. The Permittees may define the beginning and end of each fifteen-month period.

II.C.5.b Each boiler must meet the requirements of the American Society of Mechanical Engineers' (ASME) Pressure Vessel Code or equivalent requirements.

II.C.5.c The Distributed Control System (DCS) must be maintained as required by the instrumentation supplier or in an equivalent manner, and calibrated as necessary to maintain its required accuracies.

II.C.5.d Boiler tubes must be cleaned and replaced, as required, to maintain reasonable heat transfer efficiency and safety of boiler operations.

II.C.5.e All instrumentation and control systems must be properly calibrated as recommended by the suppliers of the devices and/or systems in accordance with written maintenance practices and maintained in good operating condition, including but not limited to: the DCS; transducers; indicator controllers; stack CO monitor; stack O_2 monitor; natural gas flow meters; hazardous waste fuel flow meters; boiler combustion chamber thermocouples; and combustion air flow meters.

II.C.6 Permit Modification

The EPA may initiate a permit modification to include additional conditions if it determines that the permit conditions specified herein are not protective of human health and the environment as required under RCRA Section 3005(c)(3).

II.D RECORDKEEPING

You must keep in the operating record of the facility all information and data which indicate that the operations of the boilers are in compliance with the limits established in this permit in accordance with 40 CFR § 266.102(e)(10).

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Christine H. Schuster
Senior Environmental Eng.
SABIC Innovative Plastics
One Lexan Lane
Mt. Vernon, IN 47620-9364

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly): Betty Greenwell
B. Date of Delivery: 1-24-2012

C. Signature
X Betty Greenwell
☑ Agent ☐ Addressee

D. Is delivery address different from item 1? ☑ Yes
If YES, enter delivery address below: ☐ No
Addressee 5/6: David Perkins

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7001 0320 0006 1448 7593

PS Form 3811, March 2001 Domestic Return Receipt 102595-01-M-1424

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

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Sent To: Christine Schuster
Street, Apt. No.; or PO Box No.: One Lexan Lane
City, State, ZIP+4: Mt Vernon IN 47620-9364

7001 0320 0006 1448 7593

PS Form 3800, January 2001 See Reverse for Instructions

GE Plastics

GE Plastics Mt. Vernon, Inc.
1 Lexan Lane, Mt. Vernon, IN 47620-9364
812-831-7000

May 14, 2004

CERTIFIED MAIL 7002 0860 0003 2017 9173

Mr. Wen Huang
Waste Management Branch, DW-8J
U.S. EPA, Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Re: Final Federal RCRA Permit
GE Plastics Mt. Vernon, Inc.
EPA ID# IND006376362

Dear Mr. Huang,

As follow-up to our May 13, 2004 telephone conversation, pursuant to to-be-revised Condition II.C.6, attached is a summary of the hardware and software modifications made to the distributive control system (DCS) for Boilers H530 A and B. Regarding Condition II.C.8.a, re: boiler efficiency calculations, you agreed that the information provided in the executive summary of July 2002 Trial Burn Report coupled with the statistical analysis of boiler efficiency provided in Exhibit E of the February 23, 2004 Petition for Review, fulfills the requirement of the condition.

I may be contacted at (812) 831-7307 concerning any questions U.S. EPA may have.

Sincerely,

David K. Perkins
Principal, Water and Waste Programs Leader

Enclosure

cc: Mr. Rob Marshall, IDEM-OL Certified Mail: 7002 0860 0003 2017 9180

Boiler DCS Modifications

May 13, 2004

1. **Controller Upgrade**
   The DCS controller for the H530 A/B boilers was upgraded from an SR90 to an SRX. The SR90 has a capacity of 320 points. The SRX has a capacity of 500 points. This change was made to ensure that the system would have the capacity for the additional accumulators for the data monitoring and calculations required by the permit.

2. **Load Boiler software on SRX**
   The boiler control software was loaded to the SRX. This controller uses the same logic that the SR90 used to control the boilers.

3. **Create new accumulators for new permit limits, add alarms and trips**
   Once the logic was downloaded to the new controller, additional accumulators were created to record the data and conduct the calculations required by the permit.

4. **Upgrade graphics to display accumulators and alarms**
   A summary page was created for each boiler, displaying accumulators, accumulator limits, and current values to facilitate boiler operation and allow the operator to quickly determine the compliance status of the boiler.

5. **Revise waste feed cut-off trip test**
   The software was modified to incorporate the new waste feed cut-off parameters.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT

Facility Name and Location: GE Plastics Mt. Vernon, Inc.
One Lexan Lane,
Mt. Vernon, Indiana 47620

Owner(s): Mt. Vernon Phenol Plant Partnership
One Lexan Lane, Mt. Vernon
Indiana 47620

Operator(s): GE Plastics, Mt. Vernon, Inc.
One Lexan Lane, Mt. Vernon
Indiana 47620

U.S. EPA Identification Number: IND 006 376 362

Effective Date: **April 21, 2004**

Expiration Date: **January 21, 2009**

Authorized Activities:

The United States Environmental Protection Agency ("U.S. EPA") hereby issues a Resource Conservation and Recovery Act (RCRA) permit (hereinafter referred to as the "permit") to **GE Plastics Mt. Vernon, Inc. (Operator) and Mt. Vernon Phenol Plant Partnership (Owner)** (hereinafter referred to as the "Permittees" or addressed in the second person as "you") in connection with the boilers burning hazardous waste and associated activities at the Mt. Vernon facility in Indiana.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as RCRA) and U.S. EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Specifically, this permit addresses: (1) boilers burning hazardous waste fuel (40 CFR Part 266, Subpart H) and (2) other federal RCRA regulations for which the state has not yet been authorized.

The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit conditions issued by the State of Indiana's RCRA program authorized under 40 CFR Part 271 (hereinafter called the "state-issued portion of the RCRA permit"). Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Permit Approval:

On January 31, 1986, the State of Indiana received final authorization pursuant to Section 3006 of RCRA, 42 USC § 6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State of Indiana has also received final authorization to administer certain additional RCRA requirements on several occasions since then. However, because the U.S. EPA has not yet authorized the State of Indiana to administer certain regulations, including the Boilers and Industrial Furnaces regulations (see 40 CFR Part 266.100 et seq., also known as the BIF regulations), the U.S. EPA Region 5 is issuing the RCRA permit requirements for operations at the Permittees' facility which fall under these regulations.

You must comply with all terms and conditions contained in this permit. This permit consists of all the conditions contained herein, all documents attached hereto and all documents listed or cross-referenced in these documents, approved submittals (including plans, schedules and other documents), and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 266, 268, 270, and applicable provisions of RCRA.

This permit is based on the assumption that the information contained in: (1) the revised RCRA permit application Revision 1 dated September 2000, (2) the approved trial burn report, and (3) any subsequent modifications to the Part B application (hereinafter referred to as the "Application") is accurate, and the facility is configured, operated and maintained as specified in the permit, and as described in the permit application.

Any inaccuracies in the submitted information may be grounds for the U.S. EPA to terminate, revoke and reissue, or modify this permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43; and for enforcement action. You must inform the U.S. EPA of any deviation from, or changes in, the information in the Application that might affect your ability to comply with the applicable regulations or conditions of this permit.

Opportunity to Appeal:

Petitions for review must be submitted within 30 days after the U.S. EPA serves notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may file a petition for review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR § 124.19.

Effective Date:

This permit is effective as of April 21, 2004 and will remain in effect until January 21, 2009, unless revoked and reissued under 40 CFR § 270.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 270.51(a).

By: Willie R. Harris Date: 1/21/04

for Margaret M. Guerriero, Acting Director
Waste, Pesticides and Toxics Division

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SECTION I—STANDARD PERMIT CONDITIONS

I.A EFFECT OF PERMIT

The RCRA permit is comprised of both this permit, which contains the effective federal RCRA permit conditions, and the effective state RCRA permit. You are hereby allowed to manage hazardous waste in accordance with this permit. Under this permit, the storage and treatment of RCRA hazardous waste must comply with all terms and conditions in this permit. Other aspects of the storage and treatment of RCRA hazardous wastes are subject to the conditions in the state-issued portion of the RCRA permit. Any hazardous waste activity, which requires a RCRA permit and is not included in the RCRA permit, is prohibited.

Subject to 40 CFR § 270.4, compliance with the RCRA permit during its term generally constitutes compliance for purposes of enforcement with Subtitle C of RCRA. (40 CFR § 270.4)

This permit does not: (1) convey any property rights or any exclusive privilege (40 CFR § 270.30(g)); (2) authorize any injury to persons or property, or invasion of other private rights; or (3) authorize any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued, or any action brought, under: (1) Sections 3013 or 7003 of RCRA; (2) Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC §§ 9601 *et seq.* (commonly known as CERCLA); or (3) any other law protecting human health, welfare, or the environment.

I.B PERMIT ACTIONS

I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination

The U.S. EPA may review and modify, revoke and reissue, or terminate this permit for cause, as specified in 40 CFR § 270.41, § 270.42, and § 270.43. The U.S. EPA may also review and modify this permit, consistent with 40 CFR § 270.41, to include any terms and conditions it determines are necessary to protect human health and the environment under Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance on your part will not stay the applicability or enforceability of any permit condition. (40 CFR § 270.30(f))

You may request a modification of this permit under the procedures specified in 40 CFR § 270.42. A Class 1 modification of this permit is generally allowed without prior

approval by U.S. EPA except under certain conditions as described in 40 CFR § 270.42(a)(2). A Class 2 modification requires prior approval by U.S. EPA as described in 40 CFR § 270.42(b). However, you may perform construction associated with a Class 2 permit modification request beginning 60 days after submission of the request unless the Director, Waste, Pesticides and Toxics Division, U.S. EPA (Director) establishes a later date under 40 CFR § 270.42(b)(8). You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective. (40 CFR § 270.42(b)(8))

I.B.2 Permit Renewal

This permit may be renewed as specified in 40 CFR § 270.30(b) and Condition I.E.2 of this permit. In reviewing any application for a permit renewal, the U.S. EPA will consider improvements in the state of control and measurement technology, and changes in applicable regulations. (40 CFR § 270.30(b) and RCRA Section 3005(c)(3))

I.C SEVERABILITY

This permit's provisions are severable; if any permit provision, or the application of any permit provision to any circumstance, is held invalid, such provision's application to other circumstances and the remainder of this permit will not be affected. Invalidation of any statutory or regulatory provision on which any condition of this permit is based does not affect the validity of any other statutory or regulatory basis for that condition. (40 CFR § 124.16(a))

I.D DEFINITIONS

The terms used in this permit will have the same meaning as in 40 CFR Parts 124, 260 through 266, 268 and 270, unless this permit specifically provides otherwise. Where neither the regulations nor the permit define a term, the term's definition will be the standard dictionary definition or its generally accepted scientific or industrial meaning.

I.E DUTIES AND REQUIREMENTS

1.E.1 Duty to Comply

You must comply with all conditions of this permit, except to the extent and for the duration for which an emergency permit authorizes such noncompliance (see 40 CFR § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and will be grounds for: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (40 CFR § 270.30(a))

I.E.2 Duty to Reapply

If you wish to continue the permit-regulated activities after the expiration date, you must apply for and obtain a new permit. You must submit a complete application for a new permit at least 180 days before the permit expiration date, unless the Director grants permission for a later submittal date. The Director will not grant permission to submit the complete application for a new permit later than the permit's expiration date. (40 CFR § 270.10(h) and § 270.30(b))

I.E.3 Permit Expiration

Unless revoked or terminated, this permit and all conditions herein will be effective for a fixed term not to exceed 10 years from this permit's effective date. This permit and all conditions herein will remain in effect beyond the permit's expiration date if you have submitted a timely, complete application (40 CFR § 270.10 and §§ 270.13 through 270.29), and, through no fault of your own, the Director has not made a final determination regarding permit reissuance. (40 CFR §§ 270.50 and 270.51)

I.E.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, you are not entitled to a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with this permit. (40 CFR § 270.30(c))

I.E.5 Duty to Mitigate

In the event of noncompliance with this permit, you must take all reasonable steps to minimize releases to the environment resulting from the noncompliance and must implement all reasonable measures to prevent significant adverse impacts on human health or the environment. (40 CFR § 270.30(d))

I.E.6 Proper Operation and Maintenance

You must always properly operate and maintain all facilities and treatment and control systems (and related appurtenances) that you install or use to comply with this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires you to operate back-up or auxiliary facilities or similar systems only when necessary to comply with this permit. (40 CFR § 270.30(e))

I.E.7 Duty to Provide Information

You must provide the Director, within a reasonable time, any relevant information that the Director requests to determine whether there is cause to modify, revoke and reissue, or terminate this permit, or to determine permit compliance. You must also provide the Director, upon request, with copies of any records this permit requires. The information you must maintain under this permit is not subject to the Paperwork Reduction Act of 1980, 44 USC §§ 3501 *et seq.* (40 CFR §§ 264.74(a) and 270.30(h))

I.E.8 Inspection and Entry

Upon the presentation of credentials and other legally required documents, you must allow the Director or an authorized representative to (40 CFR § 270.30(i)):

I.E.8.a Enter at reasonable times upon your premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

I.E.8.b Have access to and copy, at reasonable times, any records that you must keep under the conditions of this permit;

I.E.8.c Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.E.8.d Sample or monitor, at reasonable times, any substances at any location to ensure permit compliance or as RCRA otherwise authorizes.

Notwithstanding any provision of this permit, U.S. EPA retains the inspection and access authority which it has under RCRA and other applicable laws.

I.E.9 Monitoring and Records

I.E.9.a Samples and measurements taken for monitoring purposes must be representative of the monitored activity. The methods used to obtain a representative sample of the wastes, contaminated media, treatment residue, or other waste to be analyzed must be the appropriate methods from Appendix I of 40 CFR Part 261, or the methods specified in the U.S. EPA-approved waste analysis plan, or an equivalent method approved by the Director. Laboratory methods must be those specified in *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* (SW-846, latest edition), *Methods for Chemical*

Analysis of Water and Wastes (EPA 600/4-79-020), or an equivalent method, as specified in the referenced waste analysis plan. (40 CFR § 270.30(j)(1))

I.E.9.b You must retain, at the facility, all records as specified in 40 CFR § 264.74.

I.E.9.c You must submit all monitoring results at the intervals specified in this permit.

I.E.9.d You must retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records, or other documents, unless a different period is specified in this permit. The 3-year period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. (40 CFR §§ 270.30(j), 270.31 and 264.74(b).)

I.E.10 Reporting Planned Changes

You must notify the Director as soon as possible of any planned physical alterations or additions to the permitted facility. (40 CFR § 270.30(l)(1))

I.E.11 Reporting Anticipated Noncompliance

You must notify the Director, in advance, of any planned changes in the permitted facility or activity that may result in permit noncompliance. You may not treat, store, or dispose of hazardous waste in the modified portion of the facility, except as provided in 40 CFR § 270.42, until: (40 CFR § 270.30(l)(2))

I.E.11.a You have submitted to the Director by certified mail or hand delivery a letter signed by Permittees and a registered professional engineer stating that the facility has been constructed or modified in compliance with this permit; and

I.E.11.b The Director has inspected the modified facility and found it to be in compliance with the conditions of this permit or if you have not received notice from the Director, within 15 days of the date of submission of the letter in paragraph I.E.11.a above, of his or her intent to inspect, prior inspection is waived and you may commence treatment, storage, or disposal of hazardous waste. (40 CFR§ 270.30(l)(2))

I.E.12 [this section intentionally left blank]

I.E.13 Transfer of Permits

This permit is not transferable to any person, except after notice to the Director. You must inform the Director and obtain prior approval of the Director before transferring ownership or operational control of the facility (40 CFR § 270.42, Appendix I). Under 40 CFR § 270.40, the Director may require permit modification, or revocation and reissuance to change the Permittee's name and incorporate other RCRA requirements. Before transferring ownership or operation of the facility during its operating life, you must notify the Director and obtain prior approval and notify the new owner or operator in writing of the requirements of this permit and the requirements of 40 CFR Parts 264 and 270. (40 CFR §§ 264.12(c), 270.30(l)(3), and 270.40(a))

I.E.14 Twenty-Four Hour Reporting

I.E.14.a You must report to the Director any noncompliance with this permit that may endanger human health or the environment. Any such information must be promptly reported orally, but no later than 24 hours after you become aware of the noncompliance.

I.E.14.b The report must include the following information (40 CFR § 270.30(l)(6)): (1) the release of any hazardous waste that may endanger public drinking water supplies; (2) the release or discharge of hazardous waste from the hazardous waste management facility; or (3) a fire or explosion from the hazardous waste management facility. The oral report describing the occurrence and its cause must include the following details:

(1) Name, title and telephone number of the person making the report;

(2) Name, address and telephone number of the facility;

(3) Name, address and telephone number of owner or operator;

(4) Date, time and type of incident;

(5) Location and cause of incident;

(6) Identification and quantity of material(s) involved;

(7) Extent of injuries, if any;

(8) Assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;

(9) Description of any emergency action taken to minimize the threat to human health and the environment; and

(10) Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.14.c In addition to the oral notification required under Conditions I.E.14.a and I.E.14.b of this permit, a written report must also be provided within 5 calendar days after you become aware of the circumstances. The written report must include, but is not limited to, the following:

(1) Name, address and telephone number of the person reporting;

(2) Incident description (noncompliance and/or release or discharge of hazardous waste), including cause, location, extent of injuries, if any, and an assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;

(3) Period(s) in which the incident (noncompliance and/or release or discharge of hazardous waste) occurred, including exact dates and times;

(4) Whether the incident's results continue to threaten human health and the environment, which will depend on whether the noncompliance has been corrected and/or the release or discharge of hazardous waste has been adequately cleaned up; and

(5) If the noncompliance has not been corrected, the anticipated period for which it is expected to continue, and the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance.

The Director may waive the requirement that the written report be provided within 5 calendar days; however, you will then be required to submit a written report within 15 calendar days of the day on which you must provide oral notice, in accordance with Conditions I.E.14.a and I.E.14.b of this permit. (40 CFR § 270.30(1)(6))

I.E.15 Other Noncompliance

You must report all instances of noncompliance not reported under Condition I.E.14 of this permit, when any other reports this permit requires are submitted. The reports must contain the information listed in Condition I.E.14. (40 CFR § 270.30(l)(10))

I.E.16 Other Information

I.E.16.a Whenever you become aware that you failed to submit or otherwise omitted any relevant facts in the permit application or other submittal, or submitted incorrect information in the permit application or other submittal, you must promptly notify the Director of any incorrect information or previously omitted information, submit the correct facts or information, and explain in writing the circumstances of the incomplete or inaccurate submittal. (40 CFR § 270.30(l)(11))

I.E.16.b All other requirements contained in 40 CFR § 270.30 not specifically described in this permit are incorporated into this permit and you must comply with all those requirements.

I.F SIGNATORY REQUIREMENT

You must sign and certify all applications, reports, or information this permit requires, or which are otherwise submitted to the Director, in accordance with 40 CFR § 270.11. (40 CFR § 270.30(k))

I.G REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR

Except as otherwise specified in this permit, all reports, notifications, or other submittals that this permit requires to be submitted to the Director should be sent by certified mail, express mail, or hand-delivered to the U.S. Environmental Protection Agency, Region 5, at the following address:

Waste Management Branch, DW-8J
Waste, Pesticides and Toxics Division
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

I.H CONFIDENTIAL INFORMATION

In accordance with 40 CFR Part 2 Subpart B, you may claim any information this permit requires, or is otherwise submitted to the Director, as confidential. You must assert any such claim at the time of submittal in the manner prescribed on the application form or instructions, or, in the case of other submittals, by stamping the words "Confidential Business Information" on each page containing such information. If you made no claim at the time of submittal, the Director may make the information available to the public without further notice. If you assert a claim, the information will be treated in accordance with the procedures in 40 CFR Part 2. (40 CFR § 270.12)

I.I DOCUMENTS TO BE MAINTAINED AT THE FACILITY

You must maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to them.

I.I.1 Operating Record

You must maintain in the facility's operating record the documents required by this permit, and by the applicable portions of 40 CFR §§ 264.1035, 264.1064, 264.1084, 264.1088, 264.1089 and 40 CFR § 264.73 (as they apply to the equipment used to comply with this permit).

I.I.2 Notifications

You must maintain notifications from generators accompanying initial incoming shipment of wastes subject to 40 CFR Part 268 Subpart C, that specify treatment standards, as required by 40 CFR §§ 264.73, 268.7, and this permit.

I.I.3 Copy of Permit

You must keep a copy of this permit on site, including all the documents listed in any attachments, and you must update it as necessary to incorporate any official permit modifications.

I.J ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE

I.J.1 All attachments and documents that this permit requires to be submitted, if any, including all plans and schedules are, upon the Director's approval, incorporated into this permit by reference and become an enforceable part of this permit. Since required items

are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to enforcement action under Section 3008 of RCRA. This action may include fines, or permit suspension or revocation.

I.J.2 This permit also includes the documents attached hereto, all documents cross-referenced in these documents, and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 268, 270, and the applicable provisions of RCRA, all of which are incorporated herein by reference.

I.J.3 Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance. The Director may grant written requests for extensions of due dates for submittals required in this permit.

I.J.4 If the Director determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Director may modify this permit according to procedures in Condition I.B of this permit.

I.J.5 If any documents attached to this permit are found to conflict with any Condition in this permit, the Condition will take precedence.

I.K COORDINATION WITH THE CLEAN AIR ACT

You must fully comply with all applicable Clean Air Act (CAA) and RCRA permit limits. Where two or more operating limitations apply, the most stringent operating limitations take precedence.

SECTION II - BOILERS (40 CFR Part 266, Subpart H)

II.A GENERAL

You must meet the applicable requirements of 40 CFR Part 266, Subpart H (§ 266.100 through § 266.112) - Hazardous Waste Burned in Boilers and Industrial Furnaces. You must also meet the requirements of 40 CFR Part 264 standards regarding:

II.A.1 Imminent Hazard Action. (40 CFR §264.4)

II.A.2 General Facility Standards. (40 CFR §§ 264.11-264.18)

II.A.3 Preparedness and Prevention. (40 CFR §§ 264.31-264.37)

II.A.4 Contingency Plan and Emergency Procedures. (40 CFR §§ 264.51-264.56)

II.A.5 Manifest System, Recordkeeping, and Reporting. (40 CFR §§ 264.71-264.77)

II.A.6 Closure. (40 CFR § 264.111-264.115)

II.A.7 Financial Requirements. (40 CFR Part 264 Subpart H, §§ 264.142, 264.143, and 264.147- 264.151)

You must process a permit modification request in accordance with 40 CFR § 270.42, if any proposed change meets one of the definitions contained in Appendix I to 40 CFR § 270.42.

II.B HAZARDOUS WASTE FUEL

II.B.1 Hazardous Waste Fuel

You may burn hazardous waste fuel generated from the following process sources:

- Phenol manufacturing distillation cracker bottoms (K022)
- Heavy end cracking byproduct light overheads (D018)
- Alpha-methyl styrene (AMS) distillation column bottoms (D001)
- Acetophenone distillation column bottoms (D001)
- Oil purge from dephenolation (D001)

The hazardous wastes described above may be mixed with Bis-phenol-A (BPA) manufacturing distillation tars, which is a non-hazardous waste.

II.B.2 Co-Firing with Natural Gas

In each boiler (H-530A and H-530B), natural gas must be fired whenever hazardous waste fuel is fired. The minimum heat input from the natural gas in each boiler when hazardous waste fuel is burned shall be 1.10 million BTU per hour (hourly rolling average).

II.B.3 Hazardous Waste Fuel Analysis and Feed Rate Limits

II.B.3.a The as-generated hazardous waste fuel shall be stored in one of the 2 holding tanks (V-525A & B). Samples shall be taken and analyzed to determine: (1) average Btu, (2) metals concentrations, (3) ash content, (4) other factors limiting the boiler operation to comply with regulatory requirements. The sample analysis results should be used for computing the required hazardous waste fuel

flow to the boilers for the purpose of meeting the boiler operating conditions, hereinafter stipulated, and the metals emission limits. You must follow the approved waste analysis plan included in the Part B Application.

II.B.3.b The hazardous waste fuel feed rate limits on metals and on total chloride and chlorine set forth in Condition II.B.3.c below are based on the approved Trial Burn Report and the Adjusted Tier I feed rate screening limits in 40 CFR §§ 266.106 and 266.107. Any significant changes in the hazardous waste fuel characteristics due to manufacturing processes which may affect the compliance of 40 CFR §§ 266.106 and 266.107, you must process a Class 3 permit modification in accordance with 40 CFR § 270.42.

II.B.3.c The ash feed to each boiler shall not exceed **3,875 g/hr**. The feed rate of each of the following constituents shall not exceed the respective maximum feed rate shown. The feed rate of each constituent must be calculated by multiplying the hazardous waste fuel hourly rolling average feed rate by the constituent's concentration.

No.	Constituents	Maximum Feed Rate Per Boiler g/hr/boiler
1	Arsenic (As)	5.2
2	Beryllium (Be)	4.8
3	Cadmium (Cd)	6.4
4	Total Chromium (Cr)	14.7
5	Antimony (Sb)	3,411
6	Barium (Ba)	568,541
7	Lead (Pb)	1,023
8	Mercury (Hg)	3,411
9	Silver (Ag)	34,112
10	Thallium (Tl)	5,685
11	Chlorine/Chloride	4,548

II.B.4 Hazardous Waste Fuel Temperature and Pressure

The hazardous waste fuel must be maintained at a minimum temperature of **140 °F** (hourly rolling average) and the temperature must be monitored on a continuous basis.

When the temperature falls below a set point, it should trigger boiler trip or automatic waste feed cutoff.

The hazardous waste fuel supply line should maintain a pressure between **60 and 110 psig** to the boiler burners. When the pressure falls below 60 psig, it should trigger boiler trip.

II.C BOILERS (H-530A and H-530B)

II.C.1 General

II.C.1.a The hazardous waste fuel boilers are designated as H-530A and H-530B. These boilers were designed and manufactured by Babcock & Wilcox (B&W) in accordance with ASME Fired Pressure Vessel Code. Each boiler is rated for 70,000 pounds/hr at 250 psig. The steam generated from the boilers is piped to a common medium pressure steam header, which is maintained at an average pressure of 175 psig.

II.C.1.b The boiler burners are also manufactured by B&W. Boiler cold start up must be fired with natural gas to establish a minimum boiler chamber temperature prior to firing hazardous waste fuel.

II.C.1.c The boilers must be operated with effective permissives and electric interlockings to ensure safe and proper operation. Failure to satisfy permissive controls should trigger boiler trip.

II.C.1.d You must conduct a trial burn every 5 years from the effective date of this permit unless otherwise directed by the Director.

II.C.2 Boiler Operating Conditions

When hazardous waste fuel is burned in the boiler, the following parameters must be monitored and the following standards must be met. The abbreviations used in the following table shall mean:

HRA: Hourly rolling average
SCFH: Standard Cubic Foot/Hour

No.	Parameters	H-530A & 530B
1	Maximum Steam Header Nominal Pressure, psig	194
2	Minimum Feedwater Supply Temperature, ^{0} F (HRA)	251
3	Maximum Hazardous Fuel Heat Input, MM Btu/Hr (HRA)	72.9
4	Maximum Hazardous Fuel Input, pounds/hour (HRA)	4,698
5	Maximum Steam Output with Hazardous Fuel, pounds/hour (HRA)	70,000
6	Maximum Total Heat Input, MM Btu/Hr (HRA)	75.0
7	Minimum Heat Input, MM Btu/Hr (HRA)	59.4
8	Minimum Oxygen Concentration in Flue Gas, % (HRA)	5.2
9	Maximum Stack Gas Temperature, ^{0} F	625
10	Minimum Boiler Chamber Temperature, ^{0} F (HRA)	1,777
11	Minimum Atom. Steam Pressure over waste feed press., psig (HRA)	20
12	Maximum CO Conc. (60-min. average), ppmv dry @ 7 % O_2	100
13	Maximum Combustion Air Flow, (HRA)	21,000
14*	Maximum Particulate Emission, grains/dscf @ 7 % O_2	0.08
15	Soot Blowing Frequencies, times/day	1

* No continuous monitoring of this item is required. It shall apply at all times and shall be met during any particulate matter stack test.

The boilers must also meet the requirements of 40 CFR § 260.10.

II.C.3 Automatic Waste Feed Cut-Offs

II.C.3.a The automatic waste feed cut-offs shall be activated when one of the following conditions occurs (40 CFR § 266.102(e)(7)(ii)):

(1) High hazardous waste fuel pressure
(2) Low hazardous waste fuel pressure
(3) Low hazardous waste fuel temperature
(4) Low atomizing steam pressure
(5) High CO concentration
(6) Low combustion chamber temperature
(7) High combustion air flow rate

II.C.3.b The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7 days when hazardous waste is burned to verify operability in accordance with 40 CFR § 266.102(e)(8)(iv).

II.C.3.c The automatic waste cutoff must be registered and recorded for the event which actuated the cutoff. The frequency of such cutoff shall not exceed 14 times per week.

II.C.4 Boiler Ancillary Equipment

Deaerating feedwater heater, chemical feed system, continuous blow-down, blow-off system, boiler trims, high and low level alarms, feedwater regulator, instrumentation and control must be properly maintained to safeguard the operations of the boilers.

II.C.5 Boiler System Maintenance Requirements

II.C.5.a Each boiler must be cleaned annually by removing, to the extent practicable, accumulated ash in the boiler. An extension of time may be requested and approved by the Director. The boiler ash must be handled, transported and disposed of as hazardous waste.

II.C.5.b Each boiler must meet the requirements of the American Society of Mechanical Engineers' (ASME) Pressure Vessel Code or equivalent requirements.

II.C.5.c The Distributed Control System (DCS) must be maintained as required by the instrumentation supplier or in an equivalent manner, and calibrated as necessary to maintain its required accuracies.

II.C.5.d Boiler tubes must be cleaned and retubed, as required, to maintain reasonable heat transfer efficiency and safety of boiler operations.

II.C.5.e All instrumentation and control systems must be properly calibrated and maintained in good operating condition, including but not limited to: the DCS; transducers; indicator controllers; stack CO monitor; stack O_2 monitor; natural gas flow meters; hazardous waste fuel flow meters; boiler combustion chamber thermocouples; and combustion air flow meters. All instrumentation shall be calibrated each calendar month and programming in the DCS for calculations of heat input and mass flow shall be checked within thirty (30) days of the effective date of this permit, and each time thereafter that such programming is revised, to confirm that such calculations are being performed correctly.

II.C.6 Additional Work to Be Completed

II.C.6.a The Permittees must upgrade the existing Distributed Control System (DCS) and the data acquisition system for the purpose of monitoring, recording, and controlling boiler operations. All transducers must be calibrated to reflect the integrity and accuracy of the acquired data. The new DCS system must be able to demonstrate compliance with regulatory requirements, except those demonstrated through trial burn.

II.C.6.b You must submit the proposed changes to the current DCS system prior to commencement of the actual work.

II.C.7 Permit Modification

The U.S. EPA will initiate a permit modification if it completes a Human Health Risk Assessment and/or Ecological Risk Assessment and finds that the results require a change in the permit conditions stipulated herein to protect human health and the environment.

II.C.8 Schedule For Submittals

II.C.8.a A complete calculation for boiler efficiency and utilization must be submitted to U.S. EPA within 3 months from the effective date of this permit.

II.D RECORDKEEPING

You must keep in the operating record of the facility all information and data which indicate that the operations of the boilers are in compliance with the limits established in this permit in accordance with 40 CFR § 266.102(e)(10).

4/20/04 WCH

GE Plastics

GE Plastics Mt. Vernon, Inc.
1 Lexan Lane, Mt. Vernon, IN 47620-9364
812-831-7000

April 16, 2004

CERTIFIED MAIL 7002 0860 0003 2017 9128

Mr. Wen Huang
Waste Management Branch, DW-8J
U.S. EPA, Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Re: Final RCRA Permit
GE Plastics Mt. Vernon, Inc.
EPA ID# IND006376362

Dear Mr. Huang,

Enclosed please find a copy of "H-530 A/B Boiler Cleaning Procedure". Submission of this procedure fulfills the request made by U.S. EPA in the "RESPONSE TO COMMENTS" document attached to the permit to submit a copy of the "boiler cleaning protocols within 3 months of the issuance of this permit". The permit was issued on January 21, 2004, so we are submitting the protocol before April 21, 2004.

I may be contacted at (812) 831-7307 concerning any questions U.S. EPA may have.

Sincerely,

David K. Perkins
Principal, Water and Waste Programs Leader

Enclosure

cc: Mr. Rob Marshall, IDEM-OL Certified Mail: 7002 0860 0003 2017 9135

H-530A/B Boiler Cleaning Procedure

1. Prepare boiler for entry by following applicable confined space entry and lockout/tagout procedures.

2. Verify all individuals who will be performing this procedure have received proper training pursuant to 29 CFR 1910.120 – Hazardous Waste Operations and Emergency Response.

3. Verify PPE has been selected pursuant to 29 CFR 1910.120 Appendix B.

4. Obtain empty open-top 55-gallon metal drums, with lids and gaskets, from Phenol RCRA 90-day storage area or site drum yard near the wastewater treatment plant for use as hazardous waste disposal drums. Label each drum in which waste will be placed.

5. Obtain Hazardous Waste drum labels from the Phenol Plant RCRA Contact or the Site Environmental Specialist, ext. 7689.

6. Place disposable plastic sheets on all exterior working areas to catch any ash which may fall onto the exterior working area or ground, e.g., entry point to the boiler(s), the stack and beneath the drums.

7. Using a broom, sweep loose ash from the end walls and floor of the firebox and shovel into a properly labeled hazardous waste disposal drum.

8. Using scrapers and brushes, remove the ash from the exterior of the boiler tubes to the extent practicable. . Collect the ash that is generated and place it in a properly labeled hazardous waste disposal drum.

9. Visually inspect each boiler tube, looking for pinholes and any sign of wear. Mark each such area found and report them to the Phenol Plant Engineer.

10. Remove manway from the stack. Using brooms and shovels remove accumulated ash from the bottom of the stack. Collect the material generated and place in a properly labeled hazardous waste disposal drum.

11. Place all PPE, shovels, brushes, brooms, plastic sheeting (carefully folded to contain all ash), and other equipment that has come into contact with the ash in a properly labeled hazardous waste disposal drum.

12. Upon filling each hazardous waste disposal drum, write the current date in the "accumulation start date" space provided on the hazardous waste label and move it within 3 calendar days to the Phenol RCRA 90-day storage area or Site RCRA 90-day storage area (Bldg. 35A).

RECEIVED

APR 2 0 2004

Technical Support and Permits Section
Waste Management Branch
Waste, Pesticides and Toxics Division
U.S. EPA - Region 5

RECEIVED

APR 2004

Technical Support and Permits Section
Waste Management Branch
Waste, Pesticides and Toxics Division
U.S. EPA - Region 3

RCRA Final Permit Sign-off

Background

Facility Name (Owner)..... Mt. Vernon Phenol Plant Partnership
(Operator)... GE Plastics Mt. Vernon, Inc.
Facility Location..... One Lexan Lane
Mt. Vernon, IN

Facility ID Number..... IND 006 376 362
Public Comment Period..... 8/8/2003 - 9/23/2003

Type of Permit

__Operating __Treatment __Disposal **Modifications:**
__Post-Closure X Storage __Subpart X __**Class 2** __**EPA Initiated**
X BIF __Incineration __Other __**Class 3**

Review Package Content

X Final Permit w/attachments X Response to Comments X Administrative Record Index
X Final Cover Letter __Public Comment Cover Letter X Administrative Record
__Other (_____)

Applicable Permit Conditions

__Land Disposal Restrictions __Other (_____)
__Air Emissions
__CMI Imposed

Concurrences

	Initials	Date
1. Permit Writer (Name): Wen Huang / Jim Blough Phone Number: 6-6191	WCH	9/24/03
2. Section Secretary	DD	9/24/03
3. Technical Expert Jae Lee	JL	12/4/03
4. Section Chief		12/10/03
5. ORC - Assistant Regional Counsel (Name): Tom Krueger - Permit Coordinator (Name): Tom Nash - Chief (Name): Deborah Gorber	TK TCN DG	12/16/03 12/31/03 1/7/04
6. IMS (in PMB) [Sign-off only if public-noticing will be done by the U.S. EPA. Cross out if not applicable.]		
7. WMB Chief		1/21/04
8. Division Director, WPTD	for MR	1/21/04

Date: _____ Comment: _____

Signed 1/21/04

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

January 21, 2004

REPLY TO THE ATTENTION OF:

DW-8J

CERTIFIED MAIL: 7000 0520 0020 5098 7957
RETURN RECEIPT REQUESTED

Mr. David K. Perkins
Principal, Water and Waste Programs Leader
GE Plastics Mt. Vernon, Inc. and
Mt. Vernon Phenol Plant Partnership
One Lexan Lane
Mt. Vernon, IN 47620-9364

RE: Final Federal RCRA Permit
IND 006 376 362

Dear Mr. Perkins:

Enclosed is a copy of the Federal portion of a Resource Conservation and Recovery Act (RCRA) Hazardous Waste permit for the above-referenced facility. The Hazardous Waste permit contains both Federal permit conditions (contained herein) and State permit conditions, which were issued separately by the State of Indiana RCRA program authorized under Title 40 of the Code of Federal Regulations (40 CFR) Part 271. When both this portion and the State permit are effective, the GE Plastics Mt. Vernon, Inc. and Mt. Vernon Phenol Plant Partnership have an effective RCRA Hazardous Waste permit. Any hazardous waste activity not included in the RCRA permit is prohibited when such activity requires a RCRA Hazardous Waste permit.

This Federal permit is effective on the date indicated on the signature page of the Federal permit. Eligibility to appeal the Federal permit is discussed further in 40 CFR §124.19. The original and one copy of the petition must be received by U.S. EPA in Washington, D.C., at the address indicated below within 30 days after service of notice of the final permit decision.

United States Environmental Protection Agency
Environmental Appeals Board (MC-1103H)
Ariel Rios Building
Washington, D.C. 20460

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
DW-8J

January 21, 2004

RE: GE Plastics Mt. Vernon, Inc. and
Mt. Vernon Phenol Plant Partnership
IND 006 376 362

Dear Sir/Madam:

On January 21, 2004, the United States Environmental Protection Agency (U.S. EPA), Region 5, issued the Federal portion of a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit for the above-referenced facility. When both Federal portion of the permit and the State of Indiana's portion of the permit are effective, GE Plastics Mt. Vernon, Inc. (Operator) and Mt. Vernon Phenol Plant Partnership (Owner), will have an effective RCRA permit.

This letter supplements the enclosed Response to Comments generated as a result of the public notice for the draft permit. This Response to Comments was prepared by the U.S. EPA and sent to interested parties.

I have made the final decision to issue the Federal portion of the RCRA Hazardous Waste Permit for the facility in Mt. Vernon, Indiana. Unless review is requested under Title 40 of the Code of Federal Regulations (40 CFR) Section § 124.19, the Federal portion of the RCRA permit becomes effective on April 21, 2004.

Eligibility to appeal this permit is discussed further in 40 CFR 124.19. The original and one copy of the petition must be received by the U.S. EPA in Washington, D.C. at the address indicated below within 33 days of the date of this letter.

United States Environmental Protection Agency
Environmental Appeals Board (MC-1103H)
Ariel Rios Building
Washington, D.C. 20460

A copy of the petition should also be sent to:

Waste Management Branch (DW-8J)
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

The procedures for filing an appeal are found in 40 CFR § 124.19. The administrative appeal procedures must be completed prior to any action seeking judicial review.

On behalf of the U.S. EPA, I wish to thank you for your interest in the final permit conditions for GE Plastics facility in Mt. Vernon, Indiana.

Sincerely,

Willie R. Harris

for Margaret M. Guerriero, Director
Waste, Pesticides and Toxics Division

Enclosure

GE Plastics Mt. Vernon, Inc. - Mt. Vernon, Indiana
IND 006 376 362 Sir/Madam Letter
Wen C. Huang September 22, 2003
File: GEPlastics-dsm

WASTE MANAGEMENT BRANCH

SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY	SECRETARY
TYPIST/ AUTHOR	IL/IN/MI SECTION CHIEF	MN/OH/WI SECTION CHIEF	POL.PREV.& SPEC.INTIV SEC. CHIEF	WMB BRANCH CHIEF	WPTD DIVISION DIRECTOR
WCH 9/24/03	12/11/03			1/21/04	1/21/04

9/03

RESPONSE TO COMMENTS
REGARDING
THE FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT TO BE ISSUED TO GE PLASTICS MT. VERNON, INC. (GE)
AND
MT. VERNON PHENOL PLANT PARTNERSHIP
MT. VERNON, INDIANA

INTRODUCTION

This response is issued pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 124.17, which requires that any changes of draft permit conditions be specified along with the reason for the change; that all significant comments be described and responded to; and that any documents cited in the response be included in the administrative record. Comments were requested regarding the United States Environmental Protection Agency's (U.S. EPA) tentative determination to reissue a RCRA permit to the Permittees.

The 45-day public comment period commenced on August 8, 2003, with a public notice in *The Mount Vernon Democrat* and a radio announcement on a local radio station, WYFM. The termination date of this comment period was September 25, 2003. Written comments on the draft Federal permit were received from GE.

Additionally, pertinent information and materials were available at the Alexandria Public Library, located at 115 W. 5th Street, Mt. Vernon, Indiana.

RESPONSE TO COMMENTS

U.S. EPA's Responses to GE's Comments on Signature Pages and Section I General Conditions

1. **Comment #1 (Page i)**: GE requests that the effective date be the date at least 3 months after the permit is issued. This will allow GE sufficient time to install and test both equipment and the computer control software needed to conduct newly required monitoring and automatic waste feed cutoffs (AWFCOs).

   U.S. EPA's Response:

   In its comments and its supplemental submission, GE has provided sufficient rationale to support an effective date of 3 months after issuance of the permit. The requested change has been made.

2. **Comment # 2 (Page ii):** The third paragraph under the heading "Permit Approval" states that one basis for the permit is "the approved trial burn report." GE believes it would clarify the permit to reference the report with more specificity to avoid potential confusion in the future regarding exactly which trial burn report is intended. Accordingly, GE requests that this paragraph be revised by inserting the following parenthetical after the phrase "approved trial

burn report": "(the RCRA Trial Burn Report Revision 1 dated July 2003, and approved July 30, 2003, is the current trial burn report)".

U.S. EPA's Response:

U.S. EPA agrees that the current approved trial burn report is the one referenced in the comment, as is clear in the administrative record. U.S. EPA does not see the need to provide that level of detail in the text of the permit. The provision will not be changed.

3. **Comment # 3 (Page 1 of 15)**: In the second paragraph of section I.A, the word "generally" should be deleted. This provision is based upon 40 CFR § 270.4(a), which does not employ this word.

U.S. EPA's Response:

"Generally" reflects the fact that 40 CFR § 270.4(a) contains exceptions to the general principle stated in the sentence. This qualifier provides fair notice to the Permittees that the protections provided are only as broad as the permit on which they are based. The provision will not be changed.

4. **Comment # 4 (Page 1 of 15)**: In the third paragraph of section I.A, the draft permit's references to sections 3008(a) and 3008(h), both of which are part of Subtitle C of RCRA, conflict with 40 CFR§ 270.4(a), which provides that compliance with the permit constitutes compliance, for purpose of enforcement, with Subtitle C of RCRA.

U.S. EPA's Response:

The reference to sections 3008(a) and 3008(h) will be removed.

5. **Comment # 5 (Page 1 of 15):** The second paragraph of section I.B.1 is an incomplete, and therefore potentially misleading, statement of the legal requirements pertaining to permit modification. Region V has used an approach in another RCRA draft permit (issued to General Electric Company, WID 086 686 003 (the "General Electric Company(Wisconsin) permit"; at page 1 of 10) that GE believes is more complete and, therefore, accurate. GE requests that the second paragraph of section I.B.1 be revised by adding language from the General Electric Company (Wisconsin) permit.

U.S. EPA's Response:

While U.S. EPA does not agree that the draft permit language was incomplete or misleading, the additional language is an accurate reflection of the regulatory requirements. Because this additional detail may help ensure that the Permittees will be aware of, and comply with, those requirements, U.S. EPA will revise the language to add the additional details requested by the Permittees.

6. **Comment # 6 (Page 4 of 15)**: Condition I.E.9.a refers to a "state-approved waste analysis

plan". While GE has a waste analysis plan, it has never been submitted to, or approved by, the State of Indiana. To our knowledge, there is no requirement that it be submitted to, or approved by, the State. We did submit a waste analysis plan as part of our Part B application, which application EPA approved on July 30, 2003. Thus, we request that the words "state-approved" be changed to "EPA-approved".

U.S. EPA's Response:

The waste analysis plan (WAP) is part of the base RCRA program which the State has the authority to review and approve. The WAP that U.S. EPA approved incorporated comments from the State, and is also considered part of the WAP the State approved prior to issuing the State portion of the facility's permit. Since GE is closing the storage facility that is the primary subject of the State permit, the state-approved WAP may be terminated. It is therefore appropriate to change the reference to the WAP for boiler operations from "state-approved" to "U.S. EPA-approved." The final permit reflects this change.

7. **Comments # 7 (Page 5 of 15)**: (A) We have two comments regarding Condition I.E.11. First, the second sentence of this Condition ("Advance notice will not constitute a defense for any noncompliance.") constitutes a legal determination without any statutory or regulatory basis. In addition, if GE provided advance notice for a planned change and EPA instituted an enforcement action concerning that change, the issue of whether the notice provided any type of defense would be dealt with in the course of that action. The specific facts and circumstances of the notice and change will be fundamental to a decision on the legal effect of the notice. To leave the second sentence in the permit would be to make a legal determination without benefit of the facts of the specific case. Thus, there is no legal or factual basis for this provision. Accordingly, GE requests that the second sentence be deleted.

(B) Second, EPA has appropriately cited to 40 CFR § 270.30(l)(2) as the source of the requirement in the first sentence. However, the balance of 40 CFR § 270.30(l)(2) was not included in the draft permit's text. GE requests that the remaining portion of § 270.30(l)(2) that is relevant be added for completeness, accuracy, and clarity.

U.S. EPA's Response:

(A) The language at issue provides the Permittees with fair notice that the mere act of providing advance notice will not by itself constitute a legal defense for noncompliance with the permit. As GE notes, the issue of whether the Permittees may have a defense for noncompliance with the permit is a matter that will be decided on the specific facts and circumstances of the planned changes and their potential impacts. The permit statement is therefore accurate, and does not limit the Permittees' ability to raise potential defenses. The provision will not be changed.

(B) Although the remaining portion of § 270.30(l)(2) addresses new facilities and may therefore be of limited relevance, the additional language will be added as requested in the interest of thoroughness.

8. **Comment # 8 (Page 5 of 15)**: (A) Condition I.E.12 should be deleted. First, GE sees no purpose in addressing a hypothetical future installation of RCRA air emission control devices; it is not relevant. To the extent that GE wants to install RCRA air emission control devices after the permit is issued, GE will do so in accordance with applicable rules, which already require GE to notify EPA (e.g., 40 CFR § 270.30(l)(1)).

(B) Second, the latter half of this condition is based upon §270.30(l)(2), which is addressed in condition I.E.11 (and to which we have requested that the entire relevant portion of §270.30(l)(2) be added). Thus, putting the provisions of §270.30(l)(2) in Condition I.E.12 is redundant. Furthermore, the provisions of §270.32(l)(2) are only triggered in the event of an anticipated noncompliance. GE does not see how installation of air emission control devices would constitute an anticipated noncompliance. Thus, none of the language of §270.30(l)(2) should be used here. GE is providing a comment upon the inspection period set forth in Condition I.E.12b. This provision contains a 30-day inspection requirement. However, the underlying rule (§270.32(l)(2)) provides for a 15-day period, not a 30-day period. Thus, if EPA does not remove the language of §270.30(l)(2) from Condition I.E.12, the timing in Condition I.E.12b should be corrected to match the regulation - 15 days.

U.S. EPA's Response:

This provision has been removed as requested. To avoid re-numbering of sections and cross-references, Condition I.E.12 will be intentionally left blank.

9. **Comment # 9 (Page 6 of 15)**: The final sentence of Condition I.E.13 is based upon the language of 40 CFR 264.12(c), which provides:

Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of this part and part 270 of this chapter.

However, the draft permit adds a reference to Part 268 that is not found in the cited regulation. Thus, EPA lacks the authority to include the reference to Part 268 in the draft permit. Accordingly, the reference should be deleted.

U.S. EPA's Response:

U.S. EPA disagrees with the assertion that it lacks authority to include the reference to Part 268 in this permit language under appropriate circumstances. In this case, however, the reference will be removed as requested. This change in no way excuses the Permittees or transferees from their obligations to comply with Part 268.

10. **Comment # 10 (Page 6 of 15)**: Condition I.E.14 Twenty-Four Hour Reporting. The text of Condition I.E.14.a adds a requirement not found in the underlying rule. The Condition requires reporting "promptly, but no later than 24 hours after you become aware of the non-compliance." The rule upon which this provision is based simply requires reporting within 24 hours. See 40

CFR § 270.30(l)(6)(i) ("The Permittee shall report any non-compliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances....."). Thus, the provision substantively changes the legal requirement.

U.S. EPA's Response:

The adverb "promptly" merely reinforces the purpose of the cited regulation and emphasizes the need to report non-compliance within 24 hours. It is still clear that providing notice within 24 hours is the standard for judging compliance, so there is no substantive change and no inconsistency with the regulation. The provision will not be changed.

11. **Comments # 11 (Page 6 of 15):** The first sentence of Condition I.E.14.b cites to two regulatory provisions - 40 CFR § 270.30(l)(6) and 40 CFR § 270.33. The latter provision does not address any of the content of this portion of the draft permit. Thus, the citation does not appear necessary, and we request that it be deleted.

In addition, the grammar and punctuation used in the text of Condition I.E.14.b before the 10 listed items differ from the rule, thereby creating confusion.

In paragraph (6)(i)(B) of the rule, the reporting requirement addresses two types of events (a release or discharge of hazardous waste, and a fire or explosion). Both events are modified by the two clauses that follow - "from a HWM facility, which could threaten the environment or human health outside the facility". The draft permit does not reflect this. While the fire/explosion event is modified by the two clauses, the release/discharge event is not. GE requests that this omission be corrected. We have provided revised text at the end of this comment.

Last, the proposed permit separates into two separate conditions (I.E.14.a and I.E.14.b) a concept that the rule treats as a single concept. The result is confusing and changes the meaning of the underlying rule. The rule (40 CFR §270.30(l)(6)(i)) requires the permittee to report certain events of noncompliance, then lists three as examples - a release of hazardous waste that may endanger a public drinking water supply; a release or discharge of hazardous waste from the HWM facility; and, a fire or explosion at the HWM facility.

However, the proposed permit separates the examples (set forth in I.E.14.b) from the reporting requirement (at I.E.14.a). The confusion is evident in the text of I.E.14.b. There, the first sentence states that the report must include certain information. The following sentence (immediately before the list of 10 items) states the same thing. The translation of the rule into permit text has resulted in a confusing outcome.

We believe the second sentence of I.E.14.b correctly points to the types of information that should be included. The first sentence is mistakenly described as contents of the report. Instead, we believe the role of the first portion of I.E.14.b is to provide examples of noncompliance events that trigger the reporting requirement in I.E.14.a.

U.S. EPA's Response:

The reference to 40 CFR §270.33 will be removed and the grammar of the paragraph will be revised as suggested to more closely parallel the regulatory language. To avoid any confusion, the final sentence before the list of 10 items will be revised to read: "The oral report describing the occurrence and its cause must include the following details:" U.S. EPA does not believe that the structure and organization of Conditions I.E.14.a and I.E.14.b otherwise create any confusion and these provisions will otherwise not be changed.

12. **Comment # 12 (Page 7 of 15)**: Condition I.E.14.c sets forth the elements of a written follow-up report. However, the Condition differs from the underlying rule in two ways, and each inappropriately changes the meaning of the rule's requirement.

First, two elements (items (2) and (3) in the draft permit text) incorrectly expand the scope of the report. Each element refers to the underlying incident that triggers the report as "noncompliance and/or release or discharge of hazardous waste". This expands the scope of the reporting requirement beyond the rule. The rule clearly states that the reports, oral and written, are triggered only by a certain type of noncompliance event, i.e., one that may endanger health or the environment. The draft permit goes beyond this by referring to a release or discharge or hazardous waste in the disjunctive with a noncompliance. GE requests that the references in items (2) and (3) to "... and/or release or discharge of hazardous waste" be deleted.

Second, most of the elements do not reflect the language of the underlying rule (40 CFR §270.30(l)(6)(iii)). The permit text inappropriately expands the regulatory requirements. We have revised the proposed rule text of these elements to faithfully translate the rule's requirements.

Last, we revised the last paragraph to make consistent the reference in the last paragraph ("written notice") to the initial language in the first paragraph ("written report"), and added "such" to clarify the reference back.

U.S. EPA's Response:

The first part of the comment is based on a strained interpretation of the language and does not require any change to the provision. The written report requirement is clearly linked to the need to provide an oral report under Condition I.E.14.a. There is no expansion of the scope of the report; information on any relevant noncompliance, release and discharge is required by the regulation. The additional information requirements cited in the second part of the comment are logical outgrowths of the elements specifically cited in the regulation and are necessary to place the information in context. They are narrowly crafted and closely linked to the specific elements listed in the regulation and are consistent with those specific elements. The reference to "notice" will be changed to "report" as requested, but the provision will otherwise not be changed.

13. **Comment # 13 (Page 8 of 15)**: Condition I.E.16.a inappropriately expands the requirements

imposed upon GE beyond those in the underlying rule, in several ways. First, the draft permit proposes to expand the rule's reporting requirement from one regarding the failure to submit relevant facts in the permit application to one that covers the permit application "or other submittal". There is no basis in the rule to expand the scope of this requirement to some "other submittal".

Second, the draft permit proposes to expand the rule's reporting requirement from one regarding the submission of incorrect information in the permit application or in any "report to the Director" to one that covers the permit application and other "submittals". The term "submittals" has a broader meaning than "reports to the Director". The latter refers to items the rule or permit specifically directs be sent to the Director, while the former is not so limited. Thus, both proposed requirements substantively change the scope of the underlying rule.

Third, EPA added the phrase "or otherwise omitted" in the first sentence, a phrase not found in the rule. GE does not understand what the added language is supposed to mean. We are unable to conceive of a situation where a permittee would omit a relevant fact, where that omission would not also constitute a failure to submit the relevant fact. The phrase "or otherwise omitted" is, therefore, redundant and should be deleted. On the other hand, if it has a meaning beyond the regulatory requirement, GE requests that this phrase be deleted as an improper expansion of the underlying regulatory requirement.

Last, EPA added a requirement at the end of this Condition that goes beyond the regulatory requirement to submit the correct facts or information. The draft permit requires GE to explain in writing the circumstances of the incomplete or inaccurate submittal. This requirement is not part of the rule, and should be deleted.

U.S. EPA's Response:

The provision is consistent with 40 CFR §270.30(l)(11) and will not be changed. To the extent the provision expands on the specific language of the regulation, it merely reinforces the importance of full and accurate disclosure of information to the U.S. EPA. The language puts the Permittees on fair notice that submissions can be inaccurate due to omissions as well as due to incomplete or inaccurate statements. Finally, the requirement that the Permittees explain in writing the circumstances of the incomplete or inaccurate submittal is essential to the U.S. EPA's understanding of the nature and extent of possible noncompliance and offers the Permittees an opportunity to outline any defenses and/or mitigating circumstances they may wish to assert.

14. **Comment # 14 (Page 9 of 15)**: Condition I.I.2 applies to hazardous waste facilities that accept waste from off-site generators. GE is not such a hazardous waste facility. GE requests that EPA delete this condition.

U.S. EPA's Response: Even if the Permittees do not currently accept waste from off-site generators, it is possible that the facility could elect to do so during the term of the permit. This provision will not be removed.

15. **Comments # 15 (Page 10 of 15):** The first sentence of Condition I.J.3 ("Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance.") should be deleted, for two reasons. First, the concept is adequately addressed in Condition I.J.1 ("Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to enforcement action under Section 3008 of RCRA."). Second, the sentence states a legal conclusion without taking into account the facts and circumstances surrounding an inconsistency or deviation from an approved design, plan or schedule. It is inappropriate to draw such a legal conclusion without providing GE the opportunity to demonstrate that no deviation occurred because the facts and circumstance surrounding the alleged deviation are being ignored.

U.S. EPA's Response:

Condition I.J.3 does not duplicate Condition I.J.1. Condition I.J.3 clarifies and refines the consequences of a failure to meet approved designs, plans and schedules as described in Condition I.J.1 and elsewhere. The language at issue provides the permittees with fair notice that such a failure constitutes noncompliance with the permit. As GE notes, the issue of the enforcement consequences of the noncompliance will be decided on the specific facts and circumstances surrounding an inconsistency or deviation from an approved design, plan or schedule. The statement is therefore accurate, and does not limit the permittees' ability to raise potential defenses. The provision will not be changed.

U.S. EPA's General Response to GEs' Comments on Boilers

GE makes several general comments concerning the technical conditions described in Section II pertaining to the operations of hazardous waste burning boilers. These general comments can be divided into several main categories:

(1) The Number of Parameters to Be Included in the Permit

GE asserts that monitoring only the combustion chamber temperature and CO (carbon monoxide) concentration is sufficient to meet the regulatory requirements and to ensure that the boilers would be in compliance with the Boilers and Industrial Furnaces (BIF) Rule -- in 40 CFR Part 266. GE claims that U.S. EPA has not shown that monitoring other parameters is necessary to meet the regulatory requirements.

Many other operating parameters, however, may affect the emissions of particulates and Volatile Organic Compounds (VOCs) and the safety of the boiler operations. Because the boilers at this facility are more than 20 years old and because the scope of the trial burn at the facility was limited, it is essential that good operating practices are followed and verified, and that boiler operations are closely and thoroughly monitored. Standards for combustion chamber temperature and CO concentration alone will not prevent unacceptable emissions from the boilers.

While CO is a good indication of combustion, it is not a direct indicator of what pollutants are formed at what levels, because different constituents have different combustion kinetics. For this facility the trial burn demonstrated compliance with the BIF rule only under conditions when the CO

concentration in the flue gas was very low (i.e. less than 6 parts per million by volume (ppmv) corrected to 7 % oxygen (O_2)). The BIF Rule (and the permit), however, allows operations at levels up to100 ppm of CO corrected to 7 % O_2 in the flue gas. Because the boilers were not tested under high CO concentration, the Permittees have not demonstrated that these boilers could still comply with the BIF Rule when the CO concentration is at an order of magnitude higher than what was demonstrated during the trial burn. Therefore, proper operation of the boilers is essential to assure that they will satisfy BIF emissions standards and meet the purposes of the BIF rule. As a result, permit conditions for additional operating parameters were deemed necessary to ensure the proper operation of these boilers. They are included under U.S. EPA's authority under 40 CFR §270.32(b)(2) and 40 CFR §266.102(e).

(2) Use of Trial Burn Information

GE asserts that it is not fair to include permit requirements for several parameters for which GE did not propose to monitor over a range of values in the trial burn plan. GE states that if U.S. EPA believed that limits on these parameters were necessary, it should have said so during its review of the trial burn plan. GE also states that although some data for these parameters have been provided to U.S. EPA, either in the trial burn report or in subsequent correspondence, the trial burn plan was not designed to evaluate these parameters as possible limits or conditions. As such, GE asserts these data lack sufficient sample size or quality, or both, to use as the basis of establishing permit conditions.

GE misstates the nature and purpose of the trial burn process. The purpose of a trial burn is: (1) to demonstrate compliance with the BIF Rule, (2) to establish boiler operating conditions, and (3) to identify additional conditions which may be necessary to protection of human health and the environment based on conditions observed during the trial burn. See 40 CFR §266.102(e)(2).

U.S. EPA must look to the information in the trial burn report and must also evaluate the areas not sufficiently addressed by the trial burn report in developing permit conditions. Although the U.S. EPA approves the trial burn plan, that approval is not a guarantee that the trial burn will resolve all regulatory issues and is not a limit on U.S. EPA's obligation to develop appropriate permit conditions. The original trial burn report was incomplete, which necessitated the required revisions to include other parameters and operating conditions. U.S. EPA must determine whether (and which) additional requirements must be imposed in order to assure that the control systems associated with the boiler and auxiliary equipment consistently meets the design conditions and the monitoring/recording equipment is reliable. As discussed in more detail in the responses to specific comments, sufficient information is available to establish these permit conditions.

(3) Conditions Concerning Safety and Efficiency of Boiler Operations

GE asserts that U.S. EPA has not shown the necessity for certain conditions addressing boiler operation and safety practices.

Boilers 530A and 530B were installed in 1980 and 1982, respectively. U.S. EPA is especially concerned that these hazardous waste burning boilers will approach the end of their useful lives during the life of this permit. As boilers age they typically become less reliable and more prone to malfunctions and upsets. (This concern is one of the reasons why boilers must be recertified every

three years under the interim status regulations.) Because of the expectation that performance of these boilers will decline, U.S. EPA has incorporated certain critical industrial standards into this permit that are essential to the safety and efficiency of boiler operations in accordance with 40 CFR §270.32(b)(2).

These industrial standards represent good operating practices. As such, the Permittees are likely in compliance as a matter of course. Including those standards as part of this permit ensures the safety and effectiveness of boiler operations.

As noted above, the permit regulations require U.S. EPA to set standards across a range of operating parameters in accordance with 40 CFR § 266.102(e)(2)(i) so that "for each hazardous waste, the permit will specify acceptable operating limits including, but not limited to, the following conditions as appropriate.

(A) Feed rate of hazardous waste and other fuels measured.....
(B) Minimum and maximum device production rate .....
(C) Appropriate controls on the hazardous waste firing system.....
(D) Allowable variation in boiler and industrial furnace system design or operating procedures.....
(E) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature.....
(F) An appropriate indicator of combustion gas velocity.....
(G) Such other operating requirement as are necessary to ensure that the DRE performance standard of 40 CFR § 266.104(a) is met.

Two additional facts further support the need to make sure the boilers operate under carefully controlled parameters. First, the hazardous waste boilers were cleaned 3 months prior to the trial burn. Therefore the trial burn was not conducted under worst case conditions. Accumulation of flyash in the boilers over a long period of time can have significant impacts on the particulate, VOCs and metal emissions due to re-entrainment of flyash into the flue gas. Because the permit allows the boilers to operate for more than a year without cleaning, actual operating conditions may be worse than those tested in the trial burn.

Second, GE has informed U.S. EPA that the thermocouple used for the boiler combustion chamber has to be replaced every 3 months. This is significantly shorter than the expected life of a thermocouple, which calls into question how effectively combustion chamber temperature is monitored. The thermocouple monitors the temperature of the boiler combustion chamber, providing the data used to determine compliance with regulatory requirements and to trigger safety mechanisms. The frequency and extent of thermocouple drift or failure cannot be measured. Inaccurate temperature readings resulting from deterioration of the thermocouple may cause inappropriate fluctuations in the combustion chamber temperature. There is no redundant or backup system. This concern further emphasizes the need for additional conditions to ensure that the combustion chamber temperature can be accurately monitored.

(4) Engineering Units

GE has asked that the standards for several parameters be clarified to state that they are measured in

rolling hourly averages. That is and was the intent of the draft permit where specified below. When expressed in engineering units (e.g., #/hour or #/minute), the units are the average value within the expressed interval. Therefore, #/hour is the average flow per hour, provided such flow is regulated. Units expressed in psig should be within the accepted engineering range of the gauge.

U.S. EPA's Responses to GE Plastics' Comments on Section II - Boilers

16. **Comment # 16 (Page 10 of 15)**: GE requests that the word "applicable" be inserted before "requirements" in the first sentence of Condition II.A to clarify the permit, because not all of the requirements of 40 CFR Part 266, Subpart H apply to GE.

U.S. EPA's Response:

U.S. EPA agrees to make the requested change and has inserted the word "applicable" in the final permit.

17. **Comment # 17 (Page 11 of 15):** GE states that the last paragraph of Condition II.A has already been addressed in Condition I.B.1. Thus, this condition is redundant and, for the sake of clarity, should be deleted.

U.S. EPA's Response:

Because there is no conflict between Condition II.A and Condition I.B.1, and because the purpose of Condition II.A is to re-emphasize the importance of the permit modification process under the BIF Rule, no change was made to the draft permit.

18. **Comment # 18 (Page 11 of 15):** GE requests that Condition II.B.2 be revised to make it clear that natural gas must be fired whenever hazardous waste fuel is fired, but not vice versa.

U.S. EPA's Response:

The suggested change was made to avoid any potential confusion, with the exception that the term "hazardous waste fuel" was substituted for "hazardous fuel" in the last sentence to provide further clarification. Condition II.B.2 therefore reads:

" In each boiler (H-530A and H-530B), natural gas must be fired whenever hazardous waste fuel is fired. The minimum heat input from the natural gas in each boiler when hazardous waste fuel is burned shall be 1.10 million BTU per hour (hourly rolling average)."

19, **Comments # 19 (Page 11 of 15):** The first sentence of Condition II.B.3.b is unclear. First, there are no "metal emissions" being established in the permit. Instead, the permit establishes feed rate limits on metals (and other constituents) in order to comply with the regulatory emissions standards. Second, the reference to "Adjusted Tier I" is incomplete. The regulation refers to "Adjusted Tier I feed rate screening limits". *See, e.g.*, 40 CFR §§ 266.102(e)(2)(iii), 266.102(e)(4)(i), and 266.103(b)(2)(ii). GE requested revisions to the Condition.

U.S. EPA's Response:

The suggested change to Condition II.B.3.b was made because it adds clarification without changing the substance of the Condition.

20. **Comment # 20 (Page 12 of 15)**: GE requested that Condition II.B.4 be deleted in its entirety, asserting that the BIF Rule does not require limits on hazardous waste fuel temperature or on hazardous waste line pressure. GE also requested that if the Condition was not deleted: (1) the minimum temperature be reduced to 140° F; (2) steam tracing not be required to maintain the temperature over the piping system; and (3) failure to meet the parameter can result in waste feed cutoff rather than tripping the boiler.

U.S. EPA's Response:

The hazardous waste fuel burned in GE's boilers is a very high viscosity material. Maintaining an acceptable temperature and pressure at the burner is essential to ensuring good combustion efficiency and burner safety. Temperature and pressure of the fuel affect atomization and are important to the creation of optimum fuel particle distribution, fuel air mixing, and flame pattern.

The Permittees only demonstrated that these boilers could comply with the BIF Rule with the hazardous waste fuel maintained at an elevated temperature. As a result, it is necessary to ensure proper combustion and safety under all operational conditions allowed by the permit. This is done by assuring that the Permittees will follow good engineering practices adopted by the industry. This Condition reinforces the importance of following established operating procedures.

Because of the importance of temperature and pressure to effective combustion and safety, boiler fuel trains include low limit switches for temperature and pressure. Hazardous waste fuel pressure and temperature at the burner cannot be lower than the setpoints established in the boiler trip list that the Permittees submitted to U.S. EPA. As an example, if the hazardous waste fuel pressure becomes lower than the atomizing steam pressure, it would create potential dangers to the combustion system. Instead of atomizing the fuel, steam might prevent fuel from entering the burner. Similarly, if the hazardous waste fuel temperature becomes too low, it would not allow good atomization, and therefore, combustion.

The Permittees could potentially obtain and submit data to demonstrate that greater variations in the fuel temperature, pressure, and the atomizing steam pressure will not adversely affect the required destruction and removal efficiency (DRE) for those particular boilers. The demonstration should include empirical data. With such data, the Permittees may pursue a permit modification under 40 CFR § 270.42 to change this Condition. U.S. EPA would be happy to work with the Permittees during the 30 day time period between permit issuance and effective date to pursue this change.

As to the other issues: (1) Sufficient justification was provided to support reducing the minimum temperature to 140° F and the requested change was made. (2) As requested, the permit was revised so that steam tracing is not mandated as the means of maintaining the

temperature over the piping system. The additional flexibility is appropriate, as installation of a heating system may be a more effective means of maintaining and controlling fuel temperature. (3) Additional flexibility is appropriate, so the condition is revised to provide that failure to meet the parameter must result in either waste feed cutoff or tripping the boiler.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was not changed except as described above.

21. **Comment # 21 (Page 13 of 15):** GE requested the deletion of Condition II.C.1.c, asserting that (1) the condition is vague and GE does not understand what specific requirement is being imposed, (2) EPA has no legal authority to include this Condition.

U.S. EPA's Response:

This permit contains common terminology used by the power industry. This Condition is meant to ensure that the boilers are operated with typical industry standards and general good engineering practice. The words "permissives" and "interlocking" are commonly used terms familiar to electrical/electronic control engineers. "Permissives" means a set of conditions established for a boiler and electrically wired to a master controller. "Interlocking" is an electrical control term describing interconnections of electrical circuitry. These controls help ensure that the various pieces of equipment operate in proper sequence and proper relationship to each other. If any one of these conditions is not met (or "satisfied" in engineering terms) it would lock out the system, thereby not allowing the next sequential operations to proceed. These controls will either prevent boiler startup or trigger boiler shutdown depending on when they are activated.

The condition gives the Permittees flexibility on where and how permissive and interlocking controls will be used in boiler design and operation, and has been modified slightly to reinforce this flexibility and the purpose of the condition. The Permittees should keep information concerning the settings for the permissive and interlocking controls on site.

40 CFR § 266.102(e)(2)(i)(D), states that permits will specify the scope of any "allowable variation in boiler and industrial furnace system design or operating procedures." It is, therefore, appropriate for U.S. EPA to impose Condition II.C.1.c, because it provides necessary guidelines for boiler operating procedures. The condition reinforces that these specific elements are an important part of the process that must be maintained as stated more generally in Condition I.E.6.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was modified slightly as explained above.

22. **Comment # 22 (Page 13 of 15)**: GE requested that Condition II.C.1.d be modified so that it would have other options available under 40 CFR § 270.10(h), rather than having to conduct a trial burn every 5 years. GE also asserted that an absolute deadline is not appropriate because it cannot control the timing of U.S. EPA's approval of the trial burn plan that must precede any trial burn.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments. GE's boilers are approaching the ends of their useful lives. The U.S. EPA has also received new information from GE on the reliability of thermocouples monitoring the combustion chamber temperature. GE has also informed U.S. EPA that the trial burn was conducted after a recent boiler cleaning. In light of these additional facts it is especially important that another trial burn be conducted in the 5 year time frame, or perhaps sooner to address concerns about the scope of the latest trial burn.

U.S. EPA recognizes, however, that it is possible that a delay in the U.S. EPA's approval of a trial burn plan would impact the 5-year schedule, the permit has been revised to add the phrase ".... unless otherwise directed by the Director." This language provides flexibility in the event of approval delays, and also leaves open the possibility that the Permittees could pursue alternatives to a trial burn.

No other changes have been made to the provision.

23. **Comment # 23 (Page 13 of 15):** GE requested that Condition II.C.2 be deleted because (1) it did not understand what action is required if it fails to satisfy a parameter, (2) it asserts that boiler operating parameters are irrelevant to the permit, and (3) the parameters identified in the condition are not included in the approved trial burn plan. GE also asserted that because the requirements are unclear, it has not received sufficient notice of what actions are required to comply with the permit, so that the term must either be deleted or revised and re-proposed.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

The U.S. EPA believes that the limitations questioned by the Permittees in this comment are conditions that are necessary and appropriate under 40 CFR § 266.102(e) and 40 CFR § 270.32(b)(2) to ensure protective operation of the boilers in light of the design, operation, and age of the equipment being permitted.

Whether or not to vary or optimize any or all of these parameters during the trial burn is a decision that the applicants make as part of the Trial Burn Plan submitted under 40 CFR § 266(c)(6). U.S. EPA's approval of the Trial Burn Plan does not limit the potential scope of parameters and conditions addressed in the permit.

If any one of the standards for these parameters is not met (or "satisfied" in engineering terms), the Permittees are out of compliance with the permit and are therefore subject to enforcement action. To clarify, the provision will be revised to read "the following parameters must be monitored and the following standards must be met."

While U.S. EPA does not believe this term was unclear as initially drafted, it is well-established that to the extent clarification is needed, the response to comments process is sufficient to provide such clarification without need for re-proposal of the permit in whole or

in part. See 40 CFR § 124.14(b) and In re Amoco Oil, 4 E.A.D. 954, 980 (EAB 1993).

This condition was not changed except as described above.

24. **Comment # 24 (Page 13 of 15):** GE requested the deletion of Condition II.C.2, stating that CO concentration is sufficient to monitor combustion and that steam header average pressure is not sufficiently related to combustion efficiency. GE also asserted that steam header pressure was not part of the approved trial burn plan and that the record does not provide sufficient basis to set a permit limit. GE also requests that if the condition is not deleted: (1) the limit be listed as an hourly rolling average; (2) that no minimum limit be set; and (3) that the maximum limit be set at 194 psig, a point just below the setting for the initial pressure relief point.

U.S. EPA's Response:

40 CFR § 102(e)(2)(i) specifies in part that "..... for each hazardous waste, the permit will specify acceptable operating limits including, *but not limited to*, the following conditions as appropriate:.....

...(B) *Minimum and Maximum device production rate* ....." (emphasis added)

The U.S. EPA believes that this operating parameter limit is necessary to properly characterize production rate (i.e., of steam) in the boilers. Steam temperature and pressure are essential factors for characterizing steam quality and flow. Therefore, the steam header pressure is being retained.

Steam header pressure is protected by a series of relief valves. Each boiler is protected by a series of ASME stamped safety relief valves. Any significant increase in the steam header pressure setting would impact on the boiler working pressure, therefore, the safety of boiler operations.

A boiler is a heat exchange device that converts the heat of the flue gases to steam, generated as a result of the heat exchange through boiler tubes and membrane walls. Steam output is a measurement of heat recovery. This condition helps assure that the Permittees meet the definition of "boiler" per 40 CFR § 260.10, including a 60 % minimum recovery efficiency and a minimum 75 % utilization.

GE stated that the relief valves are set at 195 psig, 200 psig, and 205 psig. This confirms the nominal header pressure of 170-180 psig, because, in general, steam relief valves start to relieve steam pressure at 5 to10 % over the set header pressure depending on the downstream steam pressure requirement and the system design pressure. GE's proposal to set the maximum limit just below the first relief point is reasonable and the condition will be revised as requested to set a maximum steam header pressure at 194 psig. The permit does not require a minimum steam header pressure because the boiler is protected by a non-return valve installed on the steam drum.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was

not changed except as noted above.

25. **Comment # 25 (Page 13 of 15)**: GE requested the deletion of Condition II.C.2 on feedwater temperature, because the limit is not required, was not part of the trial burn plan, is not directly related to hazardous waste combustion efficiency, and does not have sufficient support in the record. GE also requests that if the condition is not deleted: that the limit be measured as an hourly rolling average, and that it be revised from 255^0 to 251^0 F.

U.S. EPA's Response:

Operation of the boiler outside of the envelope defined by the trial burn period creates uncertainty about the representativeness of the emissions from the trial burn period, and major shifts in certain operating parameters can elevate the risk of catastrophic failure which could result in fugitive emissions or other accidental releases to the environment. U.S. EPA believes that establishing this limit is a reasonable and necessary exercise of its authority under 40 CFR § 266.102(e) and 40 CFR § 270.32(b)(2).

U.S. EPA accepts the proposed change to the minimum feedwater temperature from 255° F to 251° F (hourly rolling average).

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was not changed except as described above.

26. **Comment # 26 (Page 13 of 15):** GE requested that the condition on maximum hazardous fuel input be removed because CO monitoring is sufficient, U.S. EPA lacks authority to impose the condition, and the parameter was not proposed in the Trial Burn Report. GE also requested clarification that it is heat input from fuel that is being measured rather than fuel input, and requested that the limit be changed from 72.90 to 72.9 as an hourly rolling average.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

Elimination of the second decimal place and addition of the word "heat" is acceptable to provide clarification. It should be noted that the heat input is based on Higher Heating Value commonly used in the U.S., not the Lower Heating Value commonly used outside the U.S. The condition has also been clarified, as requested, to show that the standard will be measured as an hourly rolling average.

No changes were made to the condition other than the revisions described above.

27. **Comment # 27 (Page 13 of 15)**: Condition II.C.2 Maximum Hazardous Fuel Input. GE proposed to add "hourly rolling average" after pounds/hour.

U.S. EPA's Response:

The provision has been changed as requested. Please see the General Responses by U.S. EPA

to GE's Comments.

28. **Comment # 28. (Page 13 of 15)**: Condition II.C.2 Maximum steam output with hazardous waste fuel. GE stated that this condition limiting steam output is not necessary because: (1) total heat input limits provide sufficient limits on production rates as provided for in 40 CFR § 102(e)(2)(i); (2) and the parameter was not proposed in the Trial Burn Report; (3) CO monitoring is sufficient to indicate combustion effectiveness; and (4) steam output is not sufficiently related to combustion of hazardous waste fuel. GE also proposed to add "hourly rolling average" after pounds/hr if the condition is not removed.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

As GE's comment acknowledges, 40 CFR § 266.102(e)(2) specifically lists minimum and maximum production rate as a requirement to ensure compliance with the organic emission standards. In addition, steam output can represent another measurement of hazardous waste input to boilers. The boilers do not have a redundant instrumentation system, so this condition provides secondary or a backup monitoring of waste burning conditions. As described in the general comments, it is important to ensure close monitoring of the operations of these boilers given their age, the limitations of the trial burn, and the concerns related to the thermocouples. This additional check on the integrity and accuracy of the heat input data is important for this equipment. Region 5 is aware of at least one other facility with very similar boilers burning very similar waste types that has had difficulty with the accuracy of its metering devices. Gathering data on steam, heat, flue gas flow and oxygen measurements allows correlation that helps ensure the accuracy of the facility's monitoring.

The "hourly rolling average" clarification has been added as requested. This condition was not otherwise changed.

29. **Comment # 29 (Page 13 of 15):** Condition II.C.2 - Maximum Total Heat Input. GE suggested changing the numerical value from "75.00" to "75.0" and specifying that it would be measured as an hourly rolling average.

U.S. EPA's Response:

Elimination of the second decimal place and addition of "hourly rolling average" are acceptable to provide clarification. The requested changes have been made.

30. **Comment # 30 (Page 13 of 15)**: Condition II.C.2 - Minimum Heat Input. GE requested that (1) the word "total" be inserted between "minimum" and "heat" (2) "hourly rolling average" be added, and (3) the numerical value be changed from "59.40" to "59.4."

U.S. EPA's Response:

Minimum heat input is limited to the minimum heat supplied to the boiler through the burner system alone. If the word "total" is inserted, it provides a different meaning. Total heat input

to a boiler includes heat from combustion air, feedwater, fuel, chemical feed, atomizing steam, etc. The trial burn data addressed the minimum heat supplied to the boiler through the burner system alone. If the Permittees wish to make this modification in the future, they must provide a complete heat and mass balance diagram with the revised trial burn report to account for all elements of heat input to develop an appropriate standard. If the Permittees submit a permit modification request with the above-mentioned documents, U.S. EPA will review the request to modify the condition.

Elimination of the second decimal place and addition of "hourly rolling average" are acceptable to provide clarification. Those requested changes have been made.

31. **Comment # 31 (Page 13 of 15)**: Condition II.C.2 - Minimum Oxygen Concentration. GE requested that the condition be removed because CO monitoring is sufficient, U.S. EPA lacks authority to impose the condition, and the parameter was not proposed in the Trial Burn Report. GE also requested that if the condition is not removed, that "hourly rolling average" be added to clarify how compliance will be measured.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

No combustion system can achieve complete combustion under stoichiometric condition (i.e., theoretically required air or no excess oxygen in the flue gas). The amount of excess oxygen required depends on the physical and chemical characteristics (e.g., hydrogen to carbon ratio) of the fuel -- in this case, the hazardous waste fuel and natural gas. For example, burning natural gas requires much less excess combustion air than burning coal under the optimum combustion condition.

Without ensuring a minimum oxygen level in flue gas, it is possible that a "reducing" condition may be developed in the boiler, which would accelerate the deterioration of the boiler's internal components and quickly damage the combustion chamber thermocouple. Because the boilers are old and are equipped with a single element thermocouple in the combustion chamber, it is necessary to monitor the oxygen concentration in the flue gas stream to ensure good combustion and compliance with BIF Rule requirements.

If adequate combustion air is not provided, the flame temperature would rise. High flame temperature would enhance the formation of oxides of nitrogen (NO_x), and the boilers would release those pollutants to the environment.

Since combustion air (the source of the oxygen) is part of the burner firing system and 40 CFR § 266.102(e)(2)(i)(C) stipulates that such factors must be controlled, specifying a minimum flue gas oxygen concentration in the permit ensures that an optimum combustion could be achieved.

In evaluating this comment, U.S. EPA also noted that during the trial burn, the oxygen concentration in the flue gas ranged from 5.2 % (Condition 1, Run # 6) to 10.9 % (Condition 2, Run # 3). GE's trial burn data show that at a lower combustion temperature, higher oxygen

is required to comply with the BIF Rule. U.S. EPA has reconsidered the minimum oxygen concentration of 3 % stipulated in the draft permit. The originally specified 3 % oxygen concentration is adequate for a boiler fired only by natural gas. Because the trial burn report indicates a higher oxygen concentration is needed to demonstrate compliance with the BIF Rule when burning hazardous waste fuel, U.S. EPA has determined that the minimum oxygen concentration (hourly rolling average) must be increased to 5.2 %.

The addition of "hourly rolling average" is acceptable to provide clarification. No other changes were made to this condition, except as described above.

32. **Comment # 32 (Page 13 of 15)**: Condition II.C.2 - Maximum Stack Gas Temperature. GE requested that the condition be removed because monitoring CO and boiler chamber temperature is sufficient, U.S. EPA lacks authority to impose the condition, and the parameter was not proposed in the Trial Burn Report. GE also suggested that if the condition is not removed the maximum stack gas temperature be increased from 595 °F to 625 °F.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

The stack temperature is related not only to the combustion temperature, as stated by GE, but also to the steam production rate and to the overall thermal efficiency of the boiler. Regulations at 40 CFR § 260.10 require that these units demonstrate a thermal efficiency of 60 % in order to be considered a "boiler" regulated under 40 CFR § 266.100 et seq., as opposed to an incinerator. Hazardous waste incinerators are regulated under 40 CFR § 264.340 et seq., and 40 CFR Part 63 Subpart EEE. Monitoring the stack temperature will allow the boilers' regulatory status to be verified in real time. To reinforce the importance of this verification, Condition II.C.2 will be revised to make clear that the boilers must meet the requirements of 40 CFR § 260.10. U.S. EPA also requests that the Permittees provide a calculation of boiler steam utilization within 3 months of the issuance of the permit.

U.S. EPA accepts the proposal for a revised maximum temperature of 625 ^{0}F (hourly rolling average) and the provision was modified to include that change and the other change discussed above.

33. **Comment # 33 (Page 13 of 15):** Condition II.C.2 - Minimum Boiler Chamber Temperature. GE suggested the addition of "hourly rolling average" for clarification.

U.S. EPA's Response:

The addition of "hourly rolling average" is acceptable to provide clarification.

34. **Comment # 34 (Page 13 of 15)**: Condition II.C.2 - Minimum Atomizing Steam Pressure. GE requested that the condition be removed because CO monitoring is sufficient, U.S. EPA lacks authority to impose the condition, and the parameter was not proposed in the Trial Burn Report. GE also suggests that if the condition is not removed, the minimum steam atomizing pressure be changed from 25 to 20 psig (hourly rolling average).

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

Operation of the boiler outside of the envelope defined by the trial burn period creates uncertainty about the representativeness of the emissions from the trial burn period. Major changes to the waste feed mechanism or the way it is operated can reduce the effectiveness of the atomization that is essential to the continued efficient combustion of a viscous waste such as is burned in the GE boilers. U.S. EPA therefore believes that establishing this limit and the other limits contained in the permit is a reasonable and necessary exercise of its authority under 40 CFR § 266.102(e).

U.S. EPA agrees, however, with GE's justification for reducing the standard for minimum steam atomizing pressure and the standard has been revised as suggested. No other changes were made to the provision.

35. **Comment # 35 (Page 13 of 15)**: Condition II.C.2 - Maximum Combustion Air Flow. GE suggested that the combustion air flow be based on hourly basis.

U.S. EPA's Response:

Although it is customary to measure air flow in CFM (cubic foot per minute), implementing this permit limitation via an hourly average would be consistent with the implementation of other parameters. Therefore, GE's comment is accepted and changes are incorporated in the final permit.

36. **Comment # 36 (Page 13 of 15)**: Condition II.C.2 - Maximum Particulate Emission. GE stated that this condition is not necessary and should be deleted because the waste fuel ash limit would ensure compliance with the maximum particulate emission requirement of the BIF Rule and because this parameter is not routinely monitored.

U.S. EPA's Response:

The maximum particulate emission is a regulatory requirement (See 40 CFR § 266.105(a)) which applies at all times. However, U.S. EPA agrees that the Permittees are not required to monitor it on a continuous basis, unlike many of the other operating parameters. As a result, U.S. EPA has added a parenthetical clarification to the table in the permit stating that the value of 0.08 grains/dscf is not required to be continuously monitored, but applies at all times and must be met during any particulate matter stack test.

37. **Comment # 37 (Page 14 of 15)**: Condition II.C.3 - AWFCO Parameters. GE suggested that high hazardous waste fuel pressure, low hazardous waste fuel pressure, low hazardous waste fuel temperature, and low atomizing steam pressure be deleted from AWFCO, consistent with its previous comments concerning those parameters.

U.S. EPA's Response:

As described in responses to previous comments, these parameters are critical in relation to the safety and effectiveness of boiler operations. Please also see the General Responses by U.S. EPA to GE's Comments. This provision was not changed.

38. **Comment # 38 (Page 14 of 15)**: Condition II.C.3.b. GE stated that the regulatory requirements on Automatic Waste Feed Cutoff (AWFCO) verification testing is too disruptive and burdensome to their operations and suggested a revision to provide for less frequent but more thorough testing. GE also notes that "some EPA inspectors have expressed to GE that AWFCO system testing that actually closes the AWFCO valve is preferable."

U.S. EPA's Response:

AWFCO testing is a regulatory requirement. However, U.S. EPA has some flexibility under 40 CFR § 266.102(e)(8)(iv), depending on the compliance history of the boilers. If the Permittees can demonstrate that their boiler operations have been steady with minimum excursions (i.e., exceedances of operating limits, etc.) less frequent testing of AWFCO may be justified. U.S. EPA does not currently have enough information to make that determination.

The Permittees may submit a permit modification request to U.S. EPA for less frequent testing of AWFCOs, which should include proposed methods of testing/demonstration (e.g., actual shutoff of valves, or simulated shutoff without actually closing the feed valves) and support for the position that more frequent AWFCO testing is disruptive to the boiler operations. It is noted, however, that the view of "some inspectors" that actual shutoff of valves may be a preferable testing method does not necessarily reflect the U.S. EPA's position.

The provision was not changed.

39. **Comment # 39 (Page 14 of 15)**: Condition II.C.3.c - AWFCO Frequency. GE asserts that U.S. EPA has not provided a justification for the limit on the number of AWFCO activations per operating period consistent with 40 CFR § 266.102(e)(7)(ii). GE requested that this condition be deleted.

U.S. EPA's Response:

The frequency of AWFCO activation is an indication of how well the boilers are operated within the allowable limits. A frequent occurrence of AWFCOs shows that the boilers could not be controlled and operated under a steady state condition. 40 CFR § 266.102(e)(7)(ii) allows U.S. EPA to limit the number of cutoffs per operating period. Due to the age of the boilers U.S. EPA has legitimate concerns over the Permittees' boiler operations. However, U.S. EPA believes that the Permittees can have greater operational flexibility by allowing 14 AWFCOs per week, instead of 2 AWFCOs per day without compromising boiler safety and potential releases to the environment. The final permit reflects this change.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was

not changed except as described above.

40. **Comment # 40 (Page 14 of 15)**: Condition II.C.4 - Boiler Ancillary Equipment. GE requested the deletion of this provision and questioned U.S. EPA's authority to impose such a condition.

U.S. EPA's Response:

Proper maintenance of boiler ancillary equipment is an essential part of a successful and safe boiler operation. To the extent this requirement overlaps with Condition I.E.6, it clarifies and reinforces the importance of proper maintenance of this particular equipment and puts the Permittees on fair notice of that fact. Therefore, it is appropriate to retain this condition to ensure that the hazardous waste burning operation operates properly.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was not changed.

41. **Comment # 41 (Page 14 of 15)**: Condition II.C.5.a - Boiler Ash Removal. GE requested "all" ash be modified with "to the extent practicable."

U.S. EPA's Response:

The requested change has been made to this condition. U.S. EPA requests that the Permittees submit a copy of their boiler cleaning protocols within 3 months of the issuance of this permit to provide further background on the measures they will take to remove as much ash as practicable.

42. **Comment # 42 (Page 14 of 15):** Condition II.C.5.b Certification by State Boiler Inspector. GE requested the deletion of this provision, questioning U.S. EPA's authority to impose such a condition and asserting that the requirement is redundant and vague.

U.S. EPA's Response:

U.S. EPA agrees that the operational and safety requirements addressed by the State boiler inspector are either already covered by this permit or are part of State requirements that may extend beyond the scope of RCRA (and for which the State has independent enforcement authority). While the condition has been removed as requested, compliance with the State boiler requirements in addition to this permit is essential to ensure that public health and safety are protected. The rest of Condition II.C.5 has been renumbered accordingly.

43. **Comment # 43 (Page 14 of 15)**: Condition II.C.5.c - ASME Stamp. GE requested the deletion of this condition, because the original boilers met the ASME requirements, so that there is nothing that GE needs to do to comply with the requirement. GE also questioned U.S. EPA's authority to include this requirement.

U.S. EPA's Response:

It is the intent and obligation of U.S. EPA to make sure that hazardous wastes burned in

boilers do not pose an unacceptable risk of accidental or fugitive releases. The ASME standards are designed to help accomplish that same goal. Although the boilers were originally manufactured in accordance with ASME Code, this requirement ensures that these boilers have not been altered in ways that make them inconsistent with the ASME requirements. This requirement would also be relevant and important if the Permittees decided to replace a boiler under this permit. Please also see the General Responses by U.S. EPA to GE's Comments. To provide the Permittees with operational flexibility, this condition was revised to replace "and so stamped" with "or equivalent requirements."

44. **Comment # 44. (Page 14 of 15)**: Condition II.C.5.d - DCS System. GE requested that this condition be revised to require that "The Distributed Control System (DCS) must be maintained in good operating condition" because: (1) the language of the draft permit would turn its supplier's recommendations into legal requirements, and (2) a DCS does not require calibration.

U.S. EPA's Response:

U.S. EPA recognizes that through operational experience or due to system design, the Permittees may decide based on good engineering judgment to deviate from the instrumentation suppliers' recommendations in order to improve operations of the DCS system. The permit was therefore modified to add "or in an equivalent manner" after "must be maintained as required by the instrumentation supplier." To the extent this requirement overlaps with Condition I.E.6, it clarifies and reinforces the importance of proper maintenance of this particular equipment and puts the Permittees on fair notice of that fact.

Because operating and emissions monitors are part of the DCS system, the system's accuracy is important. The permit considers these process monitors to be part of the DCS, which serves its function properly only if accurately calibrated. U.S. EPA therefore believes that it is appropriate to require proper calibration as a permit condition. The DCS incorporates a data acquisition system which feeds signals reflecting the monitored parameters into the computer system through metering elements and various transducers. To ensure that accurate signals are transmitted through the metering devices, periodic calibration of the devices is required.

Please also see the General Responses by U.S. EPA to GE's Comments. This condition was not changed except as described above.

45. **Comment # 45 (Page 14 of 15)**: Condition II.C.5.e - Boiler Cleaning. GE objected to this condition, arguing that the U.S. EPA does not have authority to include it and that Title 680 of Indiana has rules governing the operation and maintenance of boilers. In addition, GE requested that if the provision is not deleted: (1) reference to "chemical" cleaning of boiler tubes be removed; (2) the term "retubing" be removed; and (3) that the term "reasonable" be inserted to describe maintenance of heat transfer efficiency.

U.S. EPA's Response:

Please see the General Responses by U.S. EPA to GE's Comments.

Because U.S. EPA's regulations covering hazardous waste burning boilers contain requirements concerning boiler efficiency, it is necessary to include requirements in the RCRA permit to reasonably ensure that the efficiency requirement will continue to be met, especially as the boilers age.

"Retubing" is a commonly used and understood term in the industry. While it contemplates "replacement" it also implies consideration of additional engineering requirements on the replacement part (e.g., boiler tubes are fabricated from special alloy steel, shaped for specific boiler design, treated and tested in accordance with ASME Code and B&W's requirements). To the extent this requirement overlaps with Condition I.E.6, it clarifies and reinforces the importance of proper maintenance of this particular equipment and puts the Permittees on fair notice of that fact.

The word "chemical" was removed from the provision as requested and the word "reasonable" was inserted after "heat transfer efficiency" as requested. The provision was otherwise not changed.

46. **Comments # 46 (Page 15 of 15)**: Condition II.C.5.f - Calibration and Maintenance of Instrumentation Devices. GE proposed a number of revisions to this condition. GE asserts that the Distributed Control System (DCS) was already addressed in Condition II.C.5.d so it is redundant to again address it here. GE also asserts that use in the condition of "etc." creates ambiguity and vagueness. It is used in a clause that sets forth examples, so it is unnecessary.

Next, GE asserts that it should not be required to maintain the instrumentation and control systems as required by the respective suppliers. GE has years of operational experience with this instrumentation and these systems that the suppliers do not. Also, the suppliers' suggested maintenance practices suffer from an inherent bias in that they receive income from conducting maintenance activities that they recommend. Given this bias, the suppliers should not set the standard in the permit. Instead, the standard should be that GE maintain the instrumentation and control systems "in good operating condition".

GE also requests that the calibration and maintenance requirements should apply to a defined list of field instrumentation to provide clarity.

GE also states that the requirement in the second sentence of the condition is pointless and should be deleted because the DCS programming has been in place for many years and works correctly. If the language is not deleted, GE states that an annual requirement calibrating or checking programmable logic controllers is not needed; the programming should only need to be checked at the beginning of the permit and then only when a programming change is made.

U.S. EPA's Response:

The U.S. EPA finds GE's proposed language reasonable and clear, but believes it may be somewhat limited compared to the more general language in the draft permit. As has been stated in earlier responses, U.S. EPA needs to ensure that reasonable measures are taken to prevent the development of situations that may lead to accidental releases, fugitive emissions,

and improperly characterized emissions. Therefore, U.S. EPA needs to ensure the proper monitoring, recording, and operation of certain devices and systems that may fall outside of the specific list of "emission and regulatory" monitors provided in GE's comments. The U.S. EPA cannot provide an exhaustive list of all such devices and systems, because we do not have a complete record on GE's monitoring and data acquisition system.

As a result, the requested language has been added in large part to the permit, but has been modified slightly to read:

All instrumentation and control systems must be properly calibrated and maintained in good operating condition, including but not limited to: the DCS; transducers; indicator controllers; stack CO monitor; stack O_2 monitor; natural gas flow meters; hazardous waste fuel flow meters; boiler combustion chamber thermocouples; and combustion air flow meters. All instrumentation shall be calibrated each calendar month and programming in the DCS for calculations of heat input and mass flow shall be checked within thirty (30) days of the effective date of this permit, and each time thereafter that such programming is revised, to confirm that such calculations are being performed correctly.

47. **Comment # 47 (Page 15 of 15)**: Condition II.C.6 - Additional Work to Be Completed. GE requested that this condition be deleted because it is redundant to existing regulatory requirements incorporated in the permit and to Condition II.C.5.d.

U.S. EPA's Response:

Condition II.C.6 clarifies and reinforces these specific requirements, putting the Permittee on notice of their importance. The provision was not changed.

48. **Comments # 48 through # 56** - GE identified a number of typographical errors, clarifications, etc.

U.S. EPA's Response:

U.S. EPA reviewed these comments and corrected the permit provisions as requested.

CHANGES TO THE DRAFT PERMIT

COVER SHEET

1. Page i, Facility Name and Location: The spacing has been corrected.

   See U.S. EPA Response to GE's Comment #48 for the reasons for this change.

2. Page iii, Signature pages: Date referenced in draft permit was deleted.

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3. Page ii: The title for Condition II.A.6 has been changed from "Closure and Post Closure" to

"Closure" to conform to the text of the permit. Condition I.E.12 was left intentionally blank. The title for Condition I.G has been changed from "Submissions" to "Submittals" to conform to the text of the permit. The index page numbers have been revised to due the changes in permit conditions.

See U.S. EPA Responses to GE's Comment #48 and #49 for the reasons for some of these changes.

SECTION I -- STANDARD PERMIT CONDITIONS

(**Note**: Page numbers are the renumbered page numbers appear in the final federal permit.)

4. Page 1 of 16, Condition I.A. Effect of Permit, 3rd paragraph: Reference to sections 3008(a) and 3008(h) was removed..

   See U.S. EPA Response to GE's Comment #4 for the reasons for this change.

5. Page 1 of 16, Condition I.B.1, Permit Action, 2nd paragraph: "You must not perform ..... a later date" was revised to read:

   "You may request a modification of this permit under the procedures specified in 40 CFR § 270.42. A Class 1 modification of this permit is generally allowed without prior approval by U.S. EPA except under certain conditions as described in 40 CFR § 270.42(a)(2). A Class 2 modification requires prior approval by U.S. EPA as described in 40 CFR § 270.42(b). However, you may perform construction associated with a Class 2 permit modification request beginning 60 days after submission of the request unless the Director, Waste, Pesticides and Toxics Division, U.S. EPA (Director) establishes a later date under 40 CFR § 270.42(b)(8). You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective." (40 CFR § 270.42(b)(8))

   See U.S. EPA's Response to GE's Comment # 5 for the reasons for this change.

6. Page 3 of 16, Condition I.E.2, first sentence: The term "permit regulated" was changed to "permit-regulated." This was an editorial correction.

   See U.S. EPA's Response to GE's Comment # 50 for the reasons for this change.

7. Page 3 of 16, Condition I.E.3, Permit Expiration: The comma after 270.50 was deleted. This was an editorial correction.

   See U.S. EPA's Response to GE's Comment # 51 for the reasons for this change.

8. Page 4 of 16, Condition I.E.8.d: The term "at reasonable times" was shifted within the sentence to make the format consistent with the preceding sentences.

See U.S. EPA's Response to GE's Comment # 52 for the reasons for this change.

9. Page 4 of 16, Condition I.E.9.a Monitoring and Records, 5th line: "..... specified in the state-approved waste analysis....." was revised to read: "..... specified in the U.S. EPA-approved waste analysis ....."

See U.S. EPA's Response to GE's Comment # 6 for the reasons for this change.

10. Page 5 of 16, Condition I.E.9.d: The comma was deleted after "documents" and a parenthetical reference to 40 CFR § 270.74(b) was added at the end of the condition. This was an editorial correction and clarification.

See U.S. EPA's Response to GE's Comment # 53 for the reasons for this change.

11. Page 5 of 16, Condition I.E.11, Reporting Anticipated Noncompliance: "Advance notice will not constitute a defense for any noncompliance" was replaced with:

"You may not treat, store or dispose of hazardous waste in the modified portion of the facility, except as provided in 40 CFR § 270.42, until: (40 CFR § 270.30(l)(2))

I.E.11.a You have submitted to the Director by certified mail or hand delivery a letter signed by Permittees and a registered professional engineer stating that the facility has been constructed or modified in compliance with this permit; and

I.E.11.b The Director has inspected the modified facility and found it to be in compliance with the conditions of this permit or if you have not received notice from the Director, within 15 days of the date of submission of the letter in paragraph I.E.11.a above, of his or her intent to inspect, prior inspection is waived and you may commence treatment, storage, or disposal of hazardous waste. (40 CFR§ 270.30(l)(2))"

See U.S. EPA's Response to GE's Comment # 7 for the reasons for this change.

12. Page 6 of 16, Condition I.E.12, Certification of Construction: This condition has been deleted and replaced with the notation: "This Section intentionally left blank."

See U.S. EPA's Response to GE's Comment # 8 for the reasons for this change.

13. Page 6 of 16, Condition I.E.13 Transfer of Permit, last sentence: "..... 40 CFR Parts 264, 268, and 270." was changed to read: "..... 40 CFR Parts 264 and 270."

See U.S. EPA's Response to GE's Comment # 9 for the reasons for this change.

14. Page 6 of 16 Condition I.E.14.b under Twenty-Four Hour Reporting was revised to read:

"**I.E.14.b** The report must include the following information (40 CFR § 270.30(l)(6)): (1) the release of any hazardous waste that may endanger public drinking water supplies; (2)

the release or discharge of hazardous waste from the hazardous waste management facility; or (3) a fire or explosion from the hazardous waste management facility. The oral report describing the occurrence and its cause must include the following details:"

See U.S. EPA's Response to GE's Comment # 11 for the reasons for this change.

15. Page 7 of 16, Condition I.E.14.c last paragraph: "....written notice be provided....." was changed to read: ".....the written report be provided ....."

See U.S. EPA's Response to GE's Comment # 12 for the reasons for this change.

16. Page 8 of 16, Condition I.G, Reports, Notifications and Submittals to the Director: "express mail delivery" was added as an option for delivery of submittals.

See U.S. EPA's Response to GE's Comment # 54 for the reasons for this change.

SECTION II -- BOILERS

17. Page 10 of 16, Condition II.A General, first sentence: "applicable" was inserted before "requirements" for clarification.

See U.S. EPA's Response to GE's Comment # 16 for the reasons for this change.

18. Page 11 of 16, Condition II.A.7 Financial Requirements: "40 CFR Subpart H, ..." was corrected to read "40 CFR Part 264 Subpart H, ..." for clarification.

See U.S. EPA's Response to GE's Comment # 55 for the reasons for this change.

19. Page 11 of 16, Condition II.B.2 Co-Firing with Natural Gas: The paragraph was revised to read:

" In each boiler (H-530A and H-530B), natural gas must be fired whenever hazardous waste fuel is fired. The minimum heat input from the natural gas in each boiler when hazardous waste fuel is burned shall be 1.10 million BTU per hour (hourly rolling average)."

See U.S. EPA's Response to GE's Comment # 18 for the reasons for this change.

20. Page 11 of 16, Condition II.B.3.a: "as generated" was changed to "as-generated" for clarification.

See U.S. EPA's Response to GE's Comment # 56 for the reasons for this change.

21. Page 12 of 16, Condition II.B.3.b, first sentence: The condition was revised to read:

"The hazardous waste fuel feed rate limits on metals and on total chloride and chlorine set forth in Condition II.B.3.c below are based on the approved Trial Burn Report and the

Adjusted Tier I feed rate screening limits in 40 CFR § 266.106 and 266.107."

See U.S. EPA's Response to GE's Comment #19 for the reasons for this change.

22. Page 12 of 16, Condition II.B.3.c: The first two sentences have been revised for clarification. "Maximum" has been deleted from the first sentence. The second sentence will read:

"The feed rate of each of the following constituents shall not exceed the respective maximum feed rate shown:"

See U.S. EPA's Response to GE's Comment #57 for the reasons for this change.

23. Page 12 of 16, Condition II.B.3.c Table. "(TI)" is replaced with "(Tl)" to correct a typographical error.

See U.S. EPA's Response to GE's Comment #58 for the reasons for this change.

24. Page 12 of 16, Condition II.B.4, Hazardous Waste Fuel Temperature and Pressure, first paragraph. The condition was revised to read:

"The hazardous waste fuel must be maintained at a minimum temperature of 140° F (hourly rolling average) and the temperature must be monitored on a continuous basis. When the temperature falls below a set point, it should trigger boiler trip or automatic waste feed cutoff."

See U.S. EPA's Response to GE's Comment # 20 for the reasons for this change.

25. Page 13 of 16, II.C.1.a. "These boilers are designed and manufactured by Bobcock & Wilcox (B&W)..." was corrected to read: "These boilers were designed and manufactured by Babcock & Wilcox (B&W)..." and "70,000 Btu/hr....." was revised to read: "70,000 pounds/hr....." to correct typographical errors.

See U.S. EPA's Response to GE's Comments #59, 60 and 61 for the reasons for this change.

26. Page 13 of 16, II.C.1.c. The Phrase "to ensure safe and proper operation" was added to the end of the first sentence. In the second sentence, "any" was deleted and "control" was made plural.

See U.S. EPA's Response to GE's Comment #21 for the reasons for these changes.

27. Page 13 of 16, II.C.1.d. The phrase "unless otherwise directed by the Director" was added to the end of the sentence.

See U.S. EPA's Response to GE's Comment # 22 for the reasons for this change.

28. Page 14 of 16, II.C.2 Boiler Operating Conditions: The following revisions were made:

(1) In the first sentence "the following conditions must be monitored and satisfied" was replaced by "the following parameters must be monitored and the following standards must be

met" for clarity;
(2) Abbreviations for HRA and SCFH were added;
(3) Hourly rolling average was added to Items 2, 3, 4, 5, 6, 7, 8, 10, and 11 in the table;
(4) "Heat" was inserted between Fuel and Input for Item 3 in the table;
(5) The unit of measurement for Item 13, Maximum Combustion Air Flow was changed from scfm to an hourly rolling average.
(6) A footnote to the table was added for Item 14 (maximum particulate emission) that reads: "No continuous monitoring of this item is required. It shall apply at all times and shall be met during any particulate matter stack test.";
(7) The numerical values in the table were revised as follows:

Parameter No. & Description	Draft Permit	Final Permit
1. Steam Header Pressure, psig	175 (avg.)	194 (max.)
2. Mini. Feedwater Supply Temp. (° F)	255	251
3. Max. Haz. Fuel Heat Input (MM Btu/hr.)	72.90	72.9
6. Max. Total Heat Input (MM Btu/hr.)	75.00	75.0
7. Min. Heat Input (MM Btu/hr.)	59.40	59.4
8. Minimum Oxygen Conc. in Flue Gas (%)	3.0	5.2
9. Max. Stack Gas Temp. (° F)	595	625
11. Min. Atom. Steam Pressure (psig)	25-45	20

(8) After the table, a sentence was added reading: "The boilers must also meet the requirements of 40 CFR § 260.10."

See U.S. EPA's Response to GE's Comments # 23-36 for the reasons for these changes.

29. Page 15 of 16, Condition II.C.3.c. "..... shall not exceed 2 times per day" was changed to read "..... shall not exceed 14 times per week."

See U.S. EPA's Response to GE's Comment # 39 for the reasons for this change.

30. Page 15 of 16, Condition II.C.5.a: The phrase ", to the extent practicable," was added after "Each boiler must be cleaned annually by removing..."

See U.S. EPA's Response to GE's Comment #41 for the reasons for this change.

31. Page 15 of 16, Condition II.C.5.b. This condition has been deleted and the rest of Condition II.C.5 has been renumbered accordingly.

See U.S. EPA's Response to GE's Comment #42 for the reasons for this change.

32. Page 15 of 16, Condition II.C.5.b. "and so stamped" was replaced with "or equivalent requirements."

See U.S. EPA's Response to GE's Comment #43 for the reasons for this change.

33. Page 15 of 16, Condition II.C.5.c. This condition was changed to add "or in an equivalent

manner," after "must be maintained as required by the instrumentation supplier."

See U.S. EPA's Response to GE's Comment #44 for the reasons for this change.

34. Page 15 of 16, Condition II.C.5.d: The word "chemical" was deleted and the word "reasonable" was added before "heat transfer efficiency".

See U.S. EPA's Response to GE's Comment #45 for the reasons for this change.

35. Page 15 of 16, Condition II.C.5.e - Calibration and Maintenance of Instrumentation Devices. This condition has been revised to read:

"All instrumentation and control systems must be properly calibrated and maintained in good operating condition, including but not limited to: the DCS; transducers; indicator controllers; stack CO monitor; stack O_2 monitor; natural gas flow meters; hazardous waste fuel flow meters; boiler combustion chamber thermocouples; and combustion air flow meters. All instrumentation shall be calibrated each calendar month and programming in the DCS for calculations of heat input and mass flow shall be checked within thirty (30) days of the effective date of this permit, and each time thereafter that such programming is revised, to confirm that such calculations are being performed correctly."

See U.S. EPA's Response to GE's Comment #46 for the reasons for this change.

36. Page 16 of 16, Condition II.D. The citation "40 CFR § 266.103(e)(10)" was revised to "40 CFR § 266.102(e)(10)" to correct a typographical error.

See U.S. EPA's Response to GE's Comment #62 for the reasons for this change.

PAGE NUMBERING CHANGES

37. Total number of pages increased from 15 to 16 and pages have been renumbered accordingly.

DETERMINATION

Based on a full review of all relevant data provided to the U.S. EPA, the U.S. EPA has determined that the final permit contains such terms and conditions necessary to protect human health and the environment.